

## Prof. BORA MAVIŞ

### Personal Information

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### International Researcher IDs

ScholarID: joOdEBgAAAAJ

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Publons / Web Of Science ResearcherID: C-3457-2008

ScopusID: 7003796647

Yoksis Researcher ID: 169408

### Education Information

Doctorate, Iowa State University, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği, United States Of America 1999 - 2003

Postgraduate, Middle East Technical University, Faculty Of Engineering, Metalurji Ve Malzeme Mühendisliği, Turkey 1997 - 1999

Undergraduate, Middle East Technical University, Faculty Of Engineering, Metalurji Ve Malzeme Mühendisliği, Turkey 1993 - 1997

### Foreign Languages

English, C1 Advanced

### Research Areas

Metallurgical and Materials Engineering, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2007 - Continues

Research Assistant, Ecole Polytechnique Fédérale de Lausanne, EPFL (The Federal Institute of Technology, Lausanne), Faculté Des Sciences Et Techniques De L'ingénieur - Stı, L'institut Des Matériaux - Imx, 2003 - 2004

Research Assistant, Iowa State University, College Of Engineering, Department Of Materials Science And Engineering, 1999 - 2003

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Metallurgical And Materials Engineering, 1998 - 1999

### Academic and Administrative Experience

Hacettepe Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2013 - 2016

Hacettepe Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2008 - 2015

## Advising Theses

- MAVİŞ B., Çeşitli organik fosfat kaynaklarıyla elde edilen kalsiyum fosfatların yapısal karakterizasyonu, Postgraduate, D.ŞİMŞEK(Student), 2016
- MAVİŞ B., Yumurta kabuğunun zarıyla bütünlüğünü bozmadan çözelti kimyasına dayalı yöntemlerle çeşitli kalsiyum fosfat fazlarına dönüştürülmesi, Postgraduate, B.OKAN(Student), 2016
- MAVİŞ B., Synthesis and characterization of tetranitro and tetraamino zinc phthalocyanines and their combinations with mica-titania pigment, Postgraduate, Y.SÖNMEZ(Student), 2014
- MAVİŞ B., Kırmızı lahana antosiyaninlerinin mika/titanya özel etki pigmentleri üzerine çöktürülmesi, Postgraduate, M.ORUNKUN(Student), 2014
- MAVİŞ B., Synthesis and characterization of single hollow opaque polymer pigments, Postgraduate, E.KARAKAYA(Student), 2013
- MAVİŞ B., Synthesis and characterization of multi-hollow opaque polymer pigments, Postgraduate, S.ASMAOĞLU(Student), 2012
- MAVİŞ B., Göbek-kabuk yapısına sahip metal/polimer nanofiberlerin sürekli ve düzenli üretilmesine yönelik sistem geliştirilmesi, Postgraduate, A.KUDAY(Student), 2012
- MAVİŞ B., Synthesis and characterization of fluorescent zinc phthalocyanine pigments and its combination pigment with mica titania pigment, Postgraduate, S.SEVİM(Student), 2012
- MAVİŞ B., Production of epoxide functionalized boehmite nanoparticles and their use in epoxide nanocomposites, Postgraduate, A.CONİKU(Student), 2012
- MAVİŞ B., Synthesis of zirconium tungstate and its use in composites with tunable thermal expansion coefficient, Postgraduate, İ.VURAL(Student), 2011
- MAVİŞ B., Production of nano alumoxane from aluminum hydroxide, Postgraduate, K.SEZGİKER(Student), 2010
- MAVİŞ B., Synthesis and characterization of copper phthalocyanine deposited mica titania pigment, Postgraduate, B.BURCU(Student), 2010
- MAVİŞ B., A novel precursor for synthesis of zirconium tungstate and preliminary studies for nanofiber production, Postgraduate, B.ÖZERCİYES(Student), 2009
- MAVİŞ B., Electrospinning of polystyrene/butyl rubber blends: A parametric study, Postgraduate, A.GÖKTAŞ(Student), 2008

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

- I. **Size and morphology controlled polyol synthesis of LiFePO<sub>4</sub> nanoparticles with addition of organic acid combinations**  
Coşkun E., Kurşun E., YILDIZ B., Aşkar Y., Bahtiyar D., AYDINOL M. K., MAVİŞ B., Çınar-Aygün S.  
Ceramics International, vol.50, no.9, pp.15915-15930, 2024 (SCI-Expanded)
- II. **Fibers of thermoplastic polymer blends activate multiple interlayer toughening mechanisms**  
Kilicoglu M., BAT E., Guenduez G., YILDIRIM M. U., URGUN K., MAVİŞ B.  
COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING, vol.158, 2022 (SCI-Expanded)
- III. **Combination effect pigments with enhanced fluorescence**  
Kahya S. S., Sonmez Y., Gunduz G., MAVİŞ B.  
PIGMENT & RESIN TECHNOLOGY, vol.48, no.4, pp.277-292, 2019 (SCI-Expanded)
- IV. **Synthesis and characterization of solvent-free hybrid alkyd resin with hyperbranched melamine core**  
Gunduz G., Keskin N., Çolak Ü., MAVİŞ B.  
JOURNAL OF COATINGS TECHNOLOGY AND RESEARCH, vol.15, no.4, pp.831-843, 2018 (SCI-Expanded)

- V. **Use of functionalized boehmite nanoparticles to improve the hardness and tribological properties of polyurethane films**  
Eroglu G., Gunduz G., Çolak Ü., MAVİŞ B.  
JOURNAL OF POLYMER RESEARCH, vol.25, no.2, 2018 (SCI-Expanded)
- VI. **Evaluation of Mechanical Properties of Various Nanofibre Reinforced Bis-GMA/TEGDMA Based Dental Composite Resins**  
Tokar N., Tokar E., MAVİŞ B., Karacaer O.  
WEST INDIAN MEDICAL JOURNAL, vol.67, no.1, pp.60-68, 2018 (SCI-Expanded)
- VII. **Synthesis of opaque and colored hollow polymer pigments**  
Karakaya E., MAVİŞ B., Gunduz G.  
POLYMER ENGINEERING AND SCIENCE, vol.57, no.9, pp.913-920, 2017 (SCI-Expanded)
- VIII. **Synthesis and characterization of multi-hollow opaque polymer pigments**  
Asmaoglu S., Gunduz G., MAVİŞ B., Colak U.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.133, no.29, 2016 (SCI-Expanded)
- IX. **Synthesis and characterization of copper phthalocyanine and tetracarboxamide copper phthalocyanine deposited mica-titania pigments**  
Topuz B., Gunduz G., MAVİŞ B., COLAK U.  
DYES AND PIGMENTS, vol.96, no.1, pp.31-37, 2013 (SCI-Expanded)
- X. **Synthesis of zirconium tungstate-zirconia core-shell composite particles**  
Khazeni N., MAVİŞ B., Gunduz G., Colak U.  
MATERIALS RESEARCH BULLETIN, vol.46, no.11, pp.2025-2031, 2011 (SCI-Expanded)
- XI. **A strategy for biomimetic hybridization of electrospun fiber mat cross-sections**  
Mavis B.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.31, no.7, pp.1357-1362, 2011 (SCI-Expanded)
- XII. **The effect of tin dioxide (SnO<sub>2</sub>) on the anatase-rutile phase transformation of titania (TiO<sub>2</sub>) in mica-titania pigments and their use in paint**  
Topuz B. B., Gunduz G., MAVİŞ B., Colak U.  
DYES AND PIGMENTS, vol.90, no.2, pp.123-128, 2011 (SCI-Expanded)
- XIII. **Synthesis of Silver Nanoparticles by Oleylamine-Oleic Acid Reduction and Its Use in Making Nanocable by Coaxial Electrospinning**  
ÇINAR S., Gunduz G., MAVİŞ B., Colak U.  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY, vol.11, no.4, pp.3669-3679, 2011 (SCI-Expanded)
- XIV. **Cellular Behavior on Epidermal Growth Factor (EGF)-Immobilized PCL/Gelatin Nanofibrous Scaffolds**  
Tigli R. S., Kazaroglu N. M., MAVİŞ B., GÜMÜŞDERELİOĞLU M.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.22, pp.207-223, 2011 (SCI-Expanded)
- XV. **Compatibility analysis of Nylon 6 and poly(ethylene-n-butyl acrylate-maleic anhydride) elastomer blends using isothermal crystallization kinetics**  
Biber E., Gunduz G., MAVİŞ B., Colak U.  
MATERIALS CHEMISTRY AND PHYSICS, vol.122, no.1, pp.93-101, 2010 (SCI-Expanded)
- XVI. **Effects of electrospinning process parameters on nanofibers obtained from Nylon 6 and poly(ethylene-n-butyl acrylate-maleic anhydride) elastomer blends using Johnson S-B statistical distribution function**  
Biber E., Gunduz G., MAVİŞ B., Colak U.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.99, no.2, pp.477-487, 2010 (SCI-Expanded)
- XVII. **Synthesis, characterization and osteoblastic activity of polycaprolactone nanofibers coated with biomimetic calcium phosphate**  
MAVİŞ B., Demirtas T. T., GÜMÜŞDERELİOĞLU M., Gunduz G., Colak U.  
ACTA BIOMATERIALIA, vol.5, no.8, pp.3098-3111, 2009 (SCI-Expanded)
- XVIII. **Electrospinning and characterization of alumina borosilicate ceramic nanofibres**

- Tanriverdi S., MAVİŞ B., Guenduez G., Colak U.  
MATERIALS SCIENCE-POLAND, vol.25, no.4, pp.957-968, 2007 (SCI-Expanded)
- XIX. **Cyanate intercalation in nickel hydroxide**  
Mavis B., Akinc M.  
CHEMISTRY OF MATERIALS, vol.18, no.22, pp.5317-5325, 2006 (SCI-Expanded)
- XX. **Kinetics of urea decomposition in the presence of transition metal ions: Ni<sup>2+</sup>**  
Mavis B., Akinc M.  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.89, no.2, pp.471-477, 2006 (SCI-Expanded)
- XXI. **Three-component layer double hydroxides by urea precipitation: structural stability and electrochemistry**  
Mavis B., Akinc M.  
JOURNAL OF POWER SOURCES, vol.134, no.2, pp.308-317, 2004 (SCI-Expanded)
- XXII. **Homogeneous precipitation of layer double hydroxides**  
Mavis B., Akinc M.  
EURO CERAMICS VIII, PTS 1-3, pp.41-44, 2004 (SCI-Expanded)
- XXIII. **Pillared layer hydroxide powders as secondary battery electrode materials**  
Akinc M., Mavis B.  
EURO CERAMICS VII, PT 1-3, pp.37-38, 2002 (SCI-Expanded)
- XXIV. **Dip coating of calcium hydroxyapatite on Ti-6Al-4V substrates**  
Mavis B., Tas A.  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.83, no.4, pp.989-991, 2000 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Details of urea decomposition in the presence of transition metal ions**  
Mavis B., Akinc M.  
27th International Cocoa Beach Conference on Advanced Ceramics Composites, Florida, United States Of America, 26 - 31 January 2003, vol.24, pp.117-122
- II. **Dip-coating of calcium hydroxyapatite on titanium alloy (Ti-6Al-4V) and stainless steel (316L) substrates**  
Mavis B., Tas A.  
Symposium on Mineralization in Natural and Synthetic Biomaterials, Massachusetts, United States Of America, 29 November - 01 December 1999, vol.599, pp.67-72

## Supported Projects

- MAVİŞ B., TUBITAK Project, Nano Melez Sistemlerin Karbon Fiber Takviyeli Polimer Matris Kompozitlerde Kftp Arayüz Toklaştırma Amacıyla Kullanımı, 2015 - Continues
- MAVİŞ B., ÇORUH M. O., Project Supported by Higher Education Institutions, Tek Hücreli Alglerde Fotosentez Sırasında Işıktan Korunma Mekanizmaları, 2015 - 2016
- MAVİŞ B., TUBITAK Project, Polimer Esaslı Opak Pigment Eldesi ve Optik Özelliklerinin Belirlenmesi, 2011 - 2013
- MAVİŞ B., TUBITAK Project, Çizilmeye Karşı Dirençli Yüzey Kaplamaları İçin İşlevselleştirilmiş İnorganik Organik Alüminoksan Nanoparçacıklarının Üretimi, 2008 - 2012
- MAVİŞ B., TUBITAK Project, Zirkonyum ve Tungsten Esaslı Nano Parçacıkların ve Nano Liflerin Çöz Pel Sol Gel Ortak Çökeltme Co Precipitation ve Elektrospınleme Yöntemleriyle Üretimi ve Uygulama Alanlarına Yönelik Özelliklerinin İncelenmesi, 2007 - 2010
- MAVİŞ B., TUBITAK Project, Elektroğırme Yöntemi ile Nanokablo Üretimi, 2007 - 2009

## **Metrics**

Publication: 26

Citation (WoS): 527

Citation (Scopus): 543

H-Index (WoS): 10

H-Index (Scopus): 10

## **Non Academic Experience**

TechPowder SA