

## Prof. BORA MAVIŞ

### Personal Information

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### Education Information

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

Post Graduate, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği, Turkey 1997 - 1999

Under Graduate, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, 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 Üniversitesi, 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, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü,  
1998 - 1999

### Professional Experience

Head of Department, Hacettepe Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2013 - 2016

Deputy Head of Department, Hacettepe Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2008 - 2015

### Advising Theses

MAVIŞ B., Çeşitli organik fosfat kaynaklarıyla elde edilen kalsiyum fosfatların yapısal karakterizasyonu, Post Graduate,

D.ŞİMŞEK(Student), 2016

MAVİŞ B., Yumurta kabuğunun zarıyla bütünlüğünü bozmadan çözelti kimyasına dayalı yöntemlerle çeşitli kalsiyum fosfat fazlarına dönüştürülmesi, Post Graduate, B.OKAN(Student), 2016

MAVİŞ B., Synthesis and characterization of tetranitro and tetraamino zinc phthalocyanines and their combinations with mica-titania pigment, Post Graduate, Y.SÖNMEZ(Student), 2014

MAVİŞ B., Kırmızı lahana antosiyaninlerinin mika/titany özel etki pigmentleri üzerine çöktürülmesi, Post Graduate, M.ORKUN(Student), 2014

MAVİŞ B., Synthesis and characterization of single hollow opaque polymer pigments, Post Graduate, E.KARAKAYA(Student), 2013

MAVİŞ B., Synthesis and characterization of multi-hollow opaque polymer pigments, Post Graduate, S.ASMAOĞLU(Student), 2012

MAVİŞ B., Göbek-kabuk yapısına sahip metal/polimer nanofiberlerin sürekli ve düzenli üretilmesine yönelik sistem geliştirilmesi, Post Graduate, A.KUDAY(Student), 2012

MAVİŞ B., Synthesis and characterization of fluorescent zinc phthalocyanine pigments and its combination pigment with mica titania pigment, Post Graduate, S.SEVİM(Student), 2012

MAVİŞ B., Production of epoxide functionalized boehmite nanoparticles and their use in epoxide nanocomposites, Post Graduate, A.CONİKU(Student), 2012

MAVİŞ B., Synthesis of zirconium tungstate and its use in composites with tunable thermal expansion coefficient, Post Graduate, İ.VURAL(Student), 2011

MAVİŞ B., Production of nano alumoxane from aluminum hydroxide, Post Graduate, K.SEZGİKER(Student), 2010

MAVİŞ B., Synthesis and characterization of copper phthalocyanine deposited mica titania pigment, Post Graduate, B.BURCU(Student), 2010

MAVİŞ B., A novel precursor for synthesis of zirconium tungstate and preliminary studies for nanofiber production, Post Graduate, B.ÖZERCİYES(Student), 2009

MAVİŞ B., Electrospinning of polystyrene/butyl rubber blends: A parametric study, Post Graduate, A.GÖKTAŞ(Student), 2008

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

- I. **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 (Journal Indexed in SCI)
- II. **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 (Journal Indexed in SCI)
- III. **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 (Journal Indexed in SCI)
- IV. **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 (Journal Indexed in SCI)
- V. **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 (Journal Indexed in SCI)
- VI. **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 (Journal Indexed in SCI)

- VII. **Synthesis and characterization of copper phthalocyanine and tetracarboxamide copper phthalocyanine deposited mica-titania pigments**  
Topuz B., Gunduz G., MAVIŞ B., COLAK U.  
DYES AND PIGMENTS, vol.96, no.1, pp.31-37, 2013 (Journal Indexed in SCI)
- VIII. **Synthesis of zirconium tungstate-zirconia core-shell composite particles**  
Khazeni N., MAVIŞ B., Gunduz G., Colak U.  
MATERIALS RESEARCH BULLETIN, vol.46, no.11, pp.2025-2031, 2011 (Journal Indexed in SCI)
- IX. **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 (Journal Indexed in SCI)
- X. **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., MAVIŞ B., Colak U.  
DYES AND PIGMENTS, vol.90, no.2, pp.123-128, 2011 (Journal Indexed in SCI)
- XI. **Synthesis of Silver Nanoparticles by Oleylamine-Oleic Acid Reduction and Its Use in Making Nanocable by Coaxial Electrospinning**  
ÇINAR S., Gunduz G., MAVIŞ B., Colak U.  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY, vol.11, no.4, pp.3669-3679, 2011 (Journal Indexed in SCI)
- XII. **Cellular Behavior on Epidermal Growth Factor (EGF)-Immobilized PCL/Gelatin Nanofibrous Scaffolds**  
Tigli R. S. , Kazaroglu N. M. , MAVIŞ B., GÜMÜŞDERELİOĞLU M.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.22, pp.207-223, 2011 (Journal Indexed in SCI)
- XIII. **Compatibility analysis of Nylon 6 and poly(ethylene-n-butyl acrylate-maleic anhydride) elastomer blends using isothermal crystallization kinetics**  
Biber E., Gunduz G., MAVIŞ B., Colak U.  
MATERIALS CHEMISTRY AND PHYSICS, vol.122, no.1, pp.93-101, 2010 (Journal Indexed in SCI)
- XIV. **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., MAVIŞ B., Colak U.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.99, no.2, pp.477-487, 2010 (Journal Indexed in SCI)
- XV. **Synthesis, characterization and osteoblastic activity of polycaprolactone nanofibers coated with biomimetic calcium phosphate**  
MAVIŞ B., Demirtas T. T. , GÜMÜŞDERELİOĞLU M., Gunduz G., Colak U.  
ACTA BIOMATERIALIA, vol.5, no.8, pp.3098-3111, 2009 (Journal Indexed in SCI)
- XVI. **Electrospinning and characterization of alumina borosilicate ceramic nanofibres**  
Tanriverdi S., MAVIŞ B., Guenduez G., Colak U.  
MATERIALS SCIENCE-POLAND, vol.25, no.4, pp.957-968, 2007 (Journal Indexed in SCI)
- XVII. **Cyanate intercalation in nickel hydroxide**  
Mavis B., Akinc M.  
CHEMISTRY OF MATERIALS, vol.18, no.22, pp.5317-5325, 2006 (Journal Indexed in SCI)
- XVIII. **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 (Journal Indexed in SCI)
- XIX. **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 (Journal Indexed in SCI)
- XX. **Homogeneous precipitation of layer double hydroxides**  
Mavis B., Akinc M.

EURO CERAMICS VIII, PTS 1-3, pp.41-44, 2004 (Journal Indexed in SCI)

**XXI. Pillared layer hydroxide powders as secondary battery electrode materials**

Akinc M., Mavis B.

EURO CERAMICS VII, PT 1-3, pp.37-38, 2002 (Journal Indexed in SCI)

**XXII. 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 (Journal Indexed in SCI)

## **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**

MAVIŞ B., TUBITAK Project, Nano Melez Sistemlerin Karbon Fiber Takviyeli Polimer Matris Kompozitlerde Kftp Arayüz Toklaştırma Amacıyla Kullanımı, 2015 - Continues

MAVIŞ B., ÇORUH M. O. , Project Supported by Higher Education Institutions, Tek Hücreli Alglerde Fotosentez Sırasında Işıktan Korunma Mekanizmaları, 2015 - 2016

MAVIŞ B., TUBITAK Project, Polimer Esash Opak Pigment Eldesi ve Optik Özelliklerinin Belirlenmesi, 2011 - 2013

MAVIŞ B., TUBITAK Project, Çizilmeye Karşı Dirençli Yüzey Kaplamaları İçin İşlevselleştirilmiş İnorganik Organik Alümoksan Nanoparçacıklarının Üretimi, 2008 - 2012

MAVIŞ B., TUBITAK Project, Zirkonyum ve Tungsten Esash 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

MAVIŞ B., TUBITAK Project, Elektroęirme Yöntemi ile Nanokablo Üretimi, 2007 - 2009

## **Citations**

Total Citations (WOS):522

h-index (WOS):10