

# Prof. HASAN ERDEM ÇAMURLU

## Personal Information

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## International Researcher IDs

ORCID: 0000-0003-3170-4492

Publons / Web Of Science ResearcherID: C-2534-2016

ScopusID: 6505915529

Yoksis Researcher ID: 24080

## Education Information

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Metalürji Ve Malzeme Mühendisliği, Turkey 2001 - 2006

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Metalürji Ve Malzeme Mühendisliği, Turkey 1998 - 2001

Undergraduate, Middle East Technical University, Faculty Of Engineering, Metalürji Ve Malzeme Mühendisliği, Turkey 1994 - 1998

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Karbotermik Yöntemle Hekzagonal Bor Nitrür Üretimi, Middle East Technical University, Mühendislik Fakültesi, Metalürji Ve Malzeme Mühendisliği, 2006

Postgraduate, Kurşun Magnezyum Niobat-Kurşun Titanat Piezoseramiklerinin Üretimi ve Karakterizasyonu, Middle East Technical University, Mühendislik Fakültesi, Metalürji Ve Malzeme Mühendisliği, 2001

## Research Areas

Mechanical Engineering, Construction and Manufacturing, Casting Methods, Material, Metallurgical and Materials Engineering, Material science and engineering, Testing and Control of Materials, Mechanical Properties, Thermal Treatment, Material Characterization, Metallic Materials, Production Metallurgy, Powder Metallurgy, Engineering and Technology

## Academic Titles / Tasks

Professor, Akdeniz University, Faculty of Engineering, Department of Mechanical Engineering, 2018 - Continues

Associate Professor, Akdeniz University, Faculty of Engineering, Department of Mechanical Engineering, 2013 - 2018  
Assistant Professor, Akdeniz University, Faculty of Engineering, Department of Mechanical Engineering, 2009 - 2013  
Research Assistant PhD, Akdeniz University, Faculty of Engineering, Department of Mechanical Engineering, 2007 - 2009  
Research Assistant, Middle East Technical University, Faculty Of Engineering, Metalurji Ve Malzeme Mühendisliği, 1998 - 2007

## Academic and Administrative Experience

Akdeniz University, 2010 - 2015

## Advising Theses

ÇAMURLU H. E., Zamak-5 Çinko-Alüminyum Alaşımının Bileşim Modifikasyonunun Mikroyapı Ve Mekanik Özelliklere Etkisinin Belirlenmesi, Postgraduate, M.Koçyiğit(Student), 2016

ÇAMURLU H. E., Alüminyum Matrisli Kompozitlerin Sıcak Presle Üretiminde Seramik Partiküllerin Sol-Jel Yöntemiyle Modifiye Edilmesinin Mekanik Özelliklere Etkisi", Akdeniz Üniversitesi Fen Bilimleri Enstitüsü, Postgraduate, Ş.ÖZDOĞAN(Student), 2011

ÇAMURLU H. E., Alüminyum Matrisli Kompozitlerin Basıncısız Sinterleme ile Üretimi ve Karakterizasyonu, Postgraduate, E.BAŞAR(Student), 2011

## Jury Memberships

Doctorate, Doktora tez savunma jürisi, Süleyman Demirel Ünivrsitesi, April, 2018

Post Graduate, Yüksek Lisans tez jürisi, Süleyman Demirel Ünivrsitesi, February, 2018

Post Graduate, Yüksek Lisans tez jürisi, Süleyman Demirel Ünivrsitesi, January, 2018

Post Graduate, Yüksek Lisans tez jürisi, Süleyman Demirel Ünivrsitesi, November, 2014

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

- I. **Volume Combustion Synthesis in Fe–Ti–C and Fe–Ti Systems**  
Kocyyigit M., ÇAMURLU H. E.  
Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, vol.54, no.1, pp.320-332, 2023 (SCI-Expanded)
- II. **Nanocomposite glass coatings containing hexagonal boron nitride nanoparticles**  
ÇAMURLU H. E., AKARSU E., Arslan O., MATHUR S.  
CERAMICS INTERNATIONAL, vol.42, no.7, pp.8856-8862, 2016 (SCI-Expanded)
- III. **Modification of hexagonal boron nitride nanoparticles with fluorosilane**  
ÇAMURLU H. E., MATHUR S., Arslan O., AKARSU E.  
CERAMICS INTERNATIONAL, vol.42, no.5, pp.6312-6318, 2016 (SCI-Expanded)
- IV. **Comparative catalytic study on the carbothermic formation of hexagonal boron nitride with Li, Na, K and Ca carbonates**  
ÇAMURLU H. E., Gencer A., Becer B.  
JOURNAL OF MATERIALS SCIENCE, vol.49, no.1, pp.371-379, 2014 (SCI-Expanded)
- V. **Catalytic effect of potassium carbonate on carbothermic production of hexagonal boron nitride**  
ÇAMURLU H. E., GENÇER A., BECER B., ÖZDOĞAN S.  
CERAMICS INTERNATIONAL, vol.39, no.8, pp.8589-8595, 2013 (SCI-Expanded)
- VI. **Production of stable hydrosols of crystalline TiO<sub>2</sub> nanoparticles synthesized at relatively low temperatures in diverse media**

- BURUNKAYA E., Akarsu M., ÇAMURLU H. E., KESMEZ O., YEŞİL Z., ASİLTÜRK M., ARPAÇ E.  
Applied Surface Science, vol.265, pp.317-323, 2013 (SCI-Expanded)
- VII. **Hydrophilic hybrid SiO<sub>2</sub>:polyethylene glycol-3-isocyanato-propyltriethoxysilane nanocomposite films**  
BURUNKAYA E., Kesmez Ö., KIRAZ N., ÇAMURLU H. E., Asilturk M., ARPAÇ E.  
THIN SOLID FILMS, vol.522, pp.238-246, 2012 (SCI-Expanded)
- VIII. **The effects and roles of CaCO<sub>3</sub> and CaO in the carbothermic formation of h-BN**  
Ozkenter A. A., ÇAMURLU H. E., Sevinc N.  
JOURNAL OF CERAMIC PROCESSING RESEARCH, vol.13, no.5, pp.533-540, 2012 (SCI-Expanded)
- IX. **Effect of external ultrasonic treatment on hypereutectic cast aluminium-silicon alloy**  
ÜNAL N., ÇAMURLU H. E., KOÇAK S., DÜZTEPE G.  
INTERNATIONAL JOURNAL OF CAST METALS RESEARCH, vol.25, no.4, pp.246-250, 2012 (SCI-Expanded)
- X. **Sol-gel thin films with anti-reflective and self-cleaning properties**  
ÇAMURLU H. E., Kesmez Ö., BURUNKAYA E., KIRAZ N., Yeşil Z., Asilturk M., ARPAÇ E.  
CHEMICAL PAPERS, vol.66, no.5, pp.461-471, 2012 (SCI-Expanded)
- XI. **Friction stir processing and characterisation of A380 cast aluminium alloy**  
ÇAMURLU H. E., ÜNAL N.  
INTERNATIONAL JOURNAL OF CAST METALS RESEARCH, vol.24, no.6, pp.357-362, 2011 (SCI-Expanded)
- XII. **Mechanochemical and volume combustion synthesis of ZrB<sub>2</sub>**  
Akgun B., ÇAMURLU H. E., Topkaya Y., Sevinc N.  
INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS, vol.29, no.5, pp.601-607, 2011 (SCI-Expanded)
- XIII. **Effect of Na<sub>2</sub>CO<sub>3</sub> on hexagonal boron nitride prepared from urea and boric acid**  
ÇAMURLU H. E.  
CERAMICS INTERNATIONAL, vol.37, no.6, pp.1993-1999, 2011 (SCI-Expanded)
- XIV. **Effect of acid, water and alcohol ratios on sol-gel preparation of antireflective amorphous SiO<sub>2</sub> coatings**  
Kesmez Ö., BURUNKAYA E., KIRAZ N., ÇAMURLU H. E., Asilturk M., ARPAÇ E.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.357, no.16-17, pp.3130-3135, 2011 (SCI-Expanded)
- XV. **Preparation of single phase molybdenum boride**  
Camurlu H. E.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.509, no.17, pp.5431-5436, 2011 (SCI-Expanded)
- XVI. **Crosslinked sodium alginate and sodium alginate-clinoptilolite (natural zeolite) composite membranes for pervaporation separation of dimethylformamide-water mixtures: A comparative study**  
Kahya S., Sanli O., Camurlu E.  
DESALINATION AND WATER TREATMENT, vol.25, no.1-3, pp.297-309, 2011 (SCI-Expanded)
- XVII. **Antibacterial glass films prepared on metal surfaces by sol-gel method**  
KIRAZ N., Kesmez Ö., BURUNKAYA E., Budama L., ACAR B., Asilturk M., ÇAMURLU H. E., ARPAÇ E.  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, vol.56, no.3, pp.227-235, 2010 (SCI-Expanded)
- XVIII. **Effect of amine catalysts on preparation of nanometric SiO<sub>2</sub> particles and antireflective films via sol-gel method**  
Kesmez Ö., KIRAZ N., BURUNKAYA E., ÇAMURLU H. E., Asilturk M., ARPAÇ E.  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, vol.56, no.2, pp.167-176, 2010 (SCI-Expanded)
- XIX. **Sol-gel synthesis of IPTES and D10H consisting fluorinated silane system for hydrophobic applications**  
BURUNKAYA E., KIRAZ N., Kesmez Ö., Asilturk M., ÇAMURLU H. E., ARPAÇ E.  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, vol.56, no.2, pp.99-106, 2010 (SCI-Expanded)
- XX. **Sol-gel synthesis of 3-(triethoxysilyl)propylsuccinicanhydride containing fluorinated silane for hydrophobic surface applications**  
KIRAZ N., BURUNKAYA E., Kesmez Ö., Asilturk M., ÇAMURLU H. E., ARPAÇ E.  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, vol.56, no.2, pp.157-166, 2010 (SCI-Expanded)

- XXI. **Preparation of aluminum-doped zinc oxide (AZO) nano particles by hydrothermal synthesis**  
BURUNKAYA E., KIRAZ N., KESMEZ O., ÇAMURLU H. E., Asiltürk M., ARPAÇ E.  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, vol.55, no.2, pp.171-176, 2010 (SCI-Expanded)
- XXII. **Sn<sup>4+</sup> or Ce<sup>3+</sup> doped TiO<sub>2</sub> photocatalytic nanometric films on antireflective nano-SiO<sub>2</sub> coated glass**  
BURUNKAYA E., KESMEZ O., KIRAZ N., ÇAMURLU H. E., ASİLTÜRK M., ARPAÇ E.  
MATERIALS CHEMISTRY AND PHYSICS, vol.120, no.2-3, pp.272-276, 2010 (SCI-Expanded)
- XXIII. **Preparation of antireflective SiO<sub>2</sub> nanometric films**  
Kesmez O., ÇAMURLU H. E., BURUNKAYA E., ARPAÇ E.  
CERAMICS INTERNATIONAL, vol.36, no.1, pp.391-394, 2010 (SCI-Expanded)
- XXIV. **Sol-gel preparation and characterization of anti-reflective and self-cleaning SiO<sub>2</sub>-TiO<sub>2</sub> double-layer nanometric films**  
Kesmez O., ÇAMURLU H. E., BURUNKAYA E., ARPAÇ E.  
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.93, no.10, pp.1833-1839, 2009 (SCI-Expanded)
- XXV. **Catalytic effect of alkaline earth oxides on carbothermic formation of hexagonal boron nitride**  
ÇAMURLU H. E., Topkaya Y., Sevinc N.  
CERAMICS INTERNATIONAL, vol.35, no.6, pp.2271-2275, 2009 (SCI-Expanded)
- XXVI. **Self-propagating high-temperature synthesis of ZrB<sub>2</sub> or TiB<sub>2</sub> reinforced Ni-Al composite powder**  
ÇAMURLU H. E., MAGLIA F.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.478, no.1-2, pp.721-725, 2009 (SCI-Expanded)
- XXVII. **Preparation of nano-size ZrB<sub>2</sub> powder by self-propagating high-temperature synthesis**  
ÇAMURLU H. E., MAGLIA F.  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.29, no.8, pp.1501-1506, 2009 (SCI-Expanded)
- XXVIII. **Electrical, structural, and microstructural characterization of nanometric La<sub>0.9</sub>Sr<sub>0.1</sub>Ga<sub>0.8</sub>Mg<sub>0.2</sub>O<sub>3-δ</sub> (LSGM) prepared by high-pressure spark plasma sintering**  
Maglia F., Anselmi-Tamburini U., Chiodelli G., ÇAMURLU H. E., Dapiaggi M., Munir Z. A.  
SOLID STATE IONICS, vol.180, no.1, pp.36-40, 2009 (SCI-Expanded)
- XXIX. **Formation of TiB<sub>2</sub> by volume combustion and mechanochemical process**  
Bilgi E., ÇAMURLU H. E., Akgun B., Topkaya Y., Sevinc N.  
MATERIALS RESEARCH BULLETIN, vol.43, no.4, pp.873-881, 2008 (SCI-Expanded)
- XXX. **Synthesis and characterization of pure and doped (Na, Ca, Sr) nanograined LaMnO<sub>3</sub> magnetoresistive ceramics**  
MAGLIA F., MALAVASI L., ÇAMURLU H. E., TACCA A., CHIODELLI G., SPINOLO G., Mozzati M. C., ANSEIMI-TAMBURINI U., Munir Z. A.  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY, vol.8, no.2, pp.846-853, 2008 (SCI-Expanded)
- XXXI. **Effect of calcium carbonate addition on carbothermic formation of hexagonal boron nitride**  
ÇAMURLU H. E., Sevinc N., TOPKAYA Y.  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.28, no.3, pp.679-689, 2008 (SCI-Expanded)
- XXXII. **Synthesis of zirconium diboride-zirconium nitride composite powders by self-propagating high-temperature synthesis**  
Camurlu H. E., MAGLIA F.  
JOURNAL OF MATERIALS SCIENCE, vol.42, no.24, pp.10288-10295, 2007 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Printing Parameters Effect on Surface Characteristics of 3D Printed PLA Materials**  
KOVAN V., TEZEL T., TOPAL E. S., ÇAMURLU H. E.  
Machines Technologies Materials, vol.12, no.7, pp.256-269, 2018 (Peer-Reviewed Journal)
- II. **Effect of Printing Parameters on Mechanical Properties of 3D Printed PLA/Carbon Fibre Composites**  
KOVAN V., TEZEL T., ÇAMURLU H. E., TOPAL E. S.  
Materials Science Non-Equilibrium Phase Transformations, vol.4, no.4, pp.126-128, 2018 (Peer-Reviewed Journal)

- III. **Formation Of Near-Nano Size TiB<sub>2</sub>-TiN-Al<sub>2</sub>O<sub>3</sub> Powder By SHS**  
 ÇAMURLU H. E., Derin B.  
 Machines, Technologies, Materials, vol.11, pp.49-51, 2016 (Peer-Reviewed Journal)
- IV. **Formation of Zr(C,N) - ZrB<sub>2</sub> Composite Powders by Self-Propagating High- Temperature Synthesis (SHS)**  
 ÇAMURLU H. E., Maglia F.  
 Int. J. Microstructure and Materials Properties, vol.4, pp.311-319, 2009 (Scopus)
- V. **Production and Characterization of Strontium and Magnesium Doped Lanthanum-Gallium Oxide (LSGM) Ceramics**  
 ÇAMURLU H. E., Maglia F., Chiodelli G.  
 Int. J. Microstructure and Materials Properties, vol.4, pp.301-310, 2009 (Scopus)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **Preparation of Al<sub>2</sub>O<sub>3</sub> Reinforced Aluminum Matrix Composites by Powder Metallurgy**  
 ÇAMURLU H. E., Tekyurt Z.  
 1st International Symposium on Light Alloys and Composite Materials (ISLAC'18), Karabük, Turkey, 22 - 24 March 2018, pp.196
- II. **Effect Of Mg Addition on Al<sub>4</sub>Cu Powder Metallurgy Alloy**  
 ÇAMURLU H. E., Bayram V.  
 1st International Symposium on Light Alloys and Composite Materials (ISLAC'18), Karabük, Turkey, 22 - 24 March 2018, pp.195
- III. **Powder Metallurgical Production and Characterization of Aluminum Matrix Composites Reinforced with TiC-Al<sub>2</sub>O<sub>3</sub>**  
 ÇAMURLU H. E., Dere M. A., Güldük G., Savaş M.  
 International Advanced Researches & Engineering Congress-2017, Osmaniye, Turkey, 16 - 18 November 2017, pp.736-739
- IV. **Preparation of Single Phase CrSi**  
 ÇAMURLU H. E., Milanese C., Maglia F.  
 8th International Advanced Technologies Symposium 2017, Elazığ, Turkey, 19 - 22 October 2017, pp.130
- V. **Effect of Cooling Rate on Microstructure and Hardness of Nodular Cast Iron**  
 ÇAMURLU H. E., Güner E., Taşkan U.  
 8th International Advanced Technologies Symposium 2017, Elazığ, Turkey, 19 - 22 October 2017, pp.135
- VI. **Al<sub>4</sub>Cu-SiC Functionally Graded Composites Obtained by Powder Metallurgical Routes**  
 ÇAMURLU H. E., Dere M., Katı A.  
 RoPM&AM 2017 5th International Conference On Powder Metallurgy & Advanced Materials, Cluj-Napoco, Romania, 17 - 20 September 2017, pp.108
- VII. **Preparation and Mechanical Properties of Carbon Nanotube Reinforced Aluminum Matrix Composites**  
 ÇAMURLU H. E., Kazaz A., Dere M., Evlek H.  
 International Conference on Diamond and Carbon Materials, Chicago, United States Of America, 17 - 18 July 2017, pp.78
- VIII. **Effect of Al part size on SHS formation of TiB<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> powder**  
 ÇAMURLU H. E.  
 18th International Metallurgy-Materials Congress, İstanbul, Turkey, 29 September - 01 October 2016, pp.223-226
- IX. **SURFACE ROUGHNESS EFFECT ON THE 3D PRINTED BUTT JOINTS STRENGTH**  
 KOVAN V., Altan G., TOPAL E. S., ÇAMURLU H. E.  
 BALTTTRIB 8th International Scientific Conference, Kaunas, Lithuania, 26 - 27 November 2015, pp.117-121
- X. **Formation of Nanoparticles By SHS**  
 ÇAMURLU H. E.

13. International Symposium On Self-Propagating High Temperature Synthesis, Antalya, Turkey, 12 - 15 October 2015, pp.50-51
- XI. **Production And Characterisation Of Titanium Diboride Reinforced Aluminum Matrix Composites Via Hot Pressing Method**  
ÇAMURLU H. E., ÖZDOĞAN Ş.  
Proceedings of the 3rd International Science and Technology Conference (ISTEC 2013), Roma, Italy, 25 - 27 June 2013, pp.1
- XII. **Preparation of Silicon Carbide-Aluminum Surface Composites by Friction Stir Processing (FSP) and Their Properties**  
ÇAMURLU H. E., ÜNAL N.  
Proceedings of the 15th International Metallurgy-Materials Congress, İstanbul, Turkey, 11 - 13 November 2010, pp.265-272
- XIII. **Alüminyum bronzunun sürtünme karıştırma yöntemiyle yüzey özelliklerinin iyileştirilmesi**  
Şahiner B., ÜNAL N., ÇAMURLU H. E.  
Proceedings of the 13th International Denizli Materials Symposium, Denizli, Turkey, 13 - 15 October 2010, pp.125-130
- XIV. **Al-Fe-Ni Bronz Dökümünde Tane İnceltme Üzerine Bir Çalışma**  
ÜNAL N., Kayak A., ÇAMURLU H. E.  
Proceedings of the 12th International Materials Symposium, Denizli, Turkey, 15 - 17 October 2008, pp.102-108
- XV. **Fazla Bor Oksitin Karbotermik Yöntemle Hekzagonal Bor Nitrür Üretimi Sırasında Oluşan Bor Karbüre Etkisi**  
ÇAMURLU H. E., SEVİNÇ N., TOPKAYA Y.  
Proceedings of the 12th International Metallurgy-Materials Congress, İstanbul, Turkey, 28 October - 02 November 2005, pp.1512-1516

## Supported Projects

KOÇKAL N. U., ÇAMURLU H. E., KUL GÜL N. İ., Project Supported by Higher Education Institutions, Granit Fabrikası Atığının Tuğla Üretiminde Kullanılmasının Araştırılması, 2017 - 2019

KAZAZ A., ÇAMURLU H. E., Project Supported by Higher Education Institutions, YÜKSEK MUKAVEMETLİ ALÜMİNYUM SIC KARBON NANOTÜP TAKVİYELİ KOMPOZİTLERİN AMMC ALAŞIMLARIN OTOMOTİV ENDÜSTRİSİ İÇİN GELİŞTİRİLMESİ, 2015 - 2017

ÇAMURLU H. E., TUBITAK Project, Hekzagonal Bor Nitrür İçeren, Dereceli Nanokompozit Kaplamaların Sol Jel Yöntemiyle Üretimi ve Karakterizasyonu, 2011 - 2013

ÇAMURLU H. E., Project Supported by Other Official Institutions, Yüksek Verimle ve Yüksek Safılıkta Titanyum Diborür Üretimi, 2009 - 2010

ÇAMURLU H. E., TUBITAK Project, Sürtünme Karıştırma ile İşleme Yöntemiyle Yüzey Kompozitlerinin Üretimi ve Karakterizasyonu, 2007 - 2009

## Memberships / Tasks in Scientific Organizations

TÜRK TOZ METALURJİSİ DERNEĞİ, Member, 2012 - Continues

METALURJİ MÜHENDİSLERİ ODASI, Member, 2006 - Continues

## Metrics

Publication: 77

Citation (WoS): 777

Citation (Scopus): 892

H-Index (WoS): 18

H-Index (Scopus): 17

## **Awards**

Topuz A., Şahan H., Şahan H., Sarvan S., Çamurlu H. E., Çamurlu P., Teşvik Ödülü, Akdeniz Üniveritesi, December 2011

ÇAMURLU H. E., GENÇ ARAŞTIRMACI ÖDÜLÜ, METALURJİ MÜHENDİSLERİ ODASI, September 2006