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Education Information

Post Doctorate, University of Sheffield, Department of Materials Science and Engineering, England 2012 - 2013

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği (Dr), Turkey 2005 - 2010

Doctorate, Tohoku University, Institute for Materials Research (Ziyaretçi Doktora Öğrencisi), Japan 2008 - 2008

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Turkey 2003 - 2005

Undergraduate, Anadolu University, Mühendislik - Mimarlık Fakültesi, Malzeme Bilimi Ve Mühendisliği Bölümü, Turkey
1998 - 2003

Foreign Languages

English

Dissertations

Doctorate, ZrB₂ esaslı kompozitlerin spark plazma sinterleme (SPS) yöntemi ile üretimi ve karakterizasyonu, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği (Dr), 2010

Postgraduate, Potasyum mikası ve florapatit içeren cam seramiklerin kristalizasyon davranışları, işlenebilirlik özellikleri üzerine değişen oranda çekirdeklenme katalisti (TiO₂) ilavesinin etkisinin incelenmesi ve , İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Seramik (YI), 2005

Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Ceramic Materials, Glass Technology and Glass Ceramics, Biomaterials, Engineering and Technology

Academic Titles / Tasks

Professor, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 2024 - Continues
Associate Professor, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 2017 - 2024
Assistant Professor, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 2012 - 2017
Lecturer PhD, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 2011 - 2012
Research Assistant, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 2004 - 2011

Advising Theses

Akın Karadayı İ., SiC ve SiC-hBN içeren TaB₂ seramiklerinin üretimi ve karakterizasyonu, Postgraduate, T.CAN(Student), 2023
Akın Karadayı İ., Grafen ve bor nitrür katkılarının titanyum diborür – titanyum karbür kompozitlerinin özellikleri üzerine etkilerinin incelenmesi, Postgraduate, B.ECEM(Student), 2023
Akın Karadayı İ., Borür katı çözeltilerin spark plazma sinterleme (SPS) yöntemi ile üretimi ve karakterizasyonu, Doctorate, M.KAPLAN(Student), 2022
Akın Karadayı İ., H-BN ilavesinin zirkonya ile toklaştırılmış alumina seramiklerinin mekanik ve biyouyumluluk özellikleri üzerine etkisinin incelenmesi, Postgraduate, G.ATA(Student), 2022
Akın Karadayı İ., İki boyutlu BN ilavesinin TiB₂-SiC ve ZrB₂-SiC kompozitlerinin mekanik özellikleri üzerine etkisinin incelenmesi, Postgraduate, C.ASLAN(Student), 2021
Akın Karadayı İ., Silisyum nitrür esaslı kompozitlerin üretimi ve karakterizasyonu, Postgraduate, D.BOZKURT(Student), 2019
Akın Karadayı İ., Grafen nano plaka takviyeli alümina-zirkonya kompozitlerinin spark plazma sinterleme yöntemi ile üretimi ve karakterizasyonu, Postgraduate, D.ALTAN(Student), 2017
Akın Karadayı İ., SİLİSYUM KARBÜR VE GRAFEN NANO PLAKA (GNP) TAKVİYELİ TİTANYUM DİBORÜR SERAMİKLERİN SPARK PLAZMA SİNERLEME YÖNTEMİ İLE ÜRETİMİ VE KARAKTERİZASYONU, Postgraduate, Ö.Kaya(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Microstructure, mechanical properties, and bone cell interactions of ZTA composites reinforced with BN**
Buyuker G. A., TUFAN Y., Kayan G. O., ERCAN B., Akın Karadayı İ., Göller G.
Ceramics International, vol.50, no.10, pp.16956-16964, 2024 (SCI-Expanded)
- II. **Characterization of spark plasma sintered graphene reinforced zirconia toughened alumina (ZTA) composites**
Akın Karadayı İ., Altan D., Bektas E. I., Kose G. T., Göller G.
Journal of the Australian Ceramic Society, vol.60, no.1, pp.25-33, 2024 (SCI-Expanded)
- III. **Production and characterization of spark plasma sintered (Ti,Nb)B₂ solid solutions with graphene nanoplatelets and hexagonal boron nitride**
Kaplan Akarsu M., Akın Karadayı İ.
Ceramics International, vol.49, no.4, pp.5582-5594, 2023 (SCI-Expanded)
- IV. **Comparative investigation of the properties of graphene nanoplatelet reinforced titanium diboride and niobium diboride ceramics**
Akın Karadayı İ., Ocak B. C., Akarsu M. K., Yücel O., Şahin F., Göller G.
International Journal of Refractory Metals and Hard Materials, vol.103, 2022 (SCI-Expanded)
- V. **Comparative study of reactive and nonreactive spark plasma sintering routes for the production of TaB₂-TaC composites**
Kaplan Akarsu M., Akın Karadayı İ., Şahin F., Göller G.
INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY, vol.19, no.1, pp.332-343, 2022 (SCI-Expanded)

- VI. **Effects of graphene nanoplatelets and hexagonal boron nitride on spark plasma sintered (Zr,Nb)B-2 solid solutions**
Akarsu M. K., Akin Karadayı İ.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.884, 2021 (SCI-Expanded)
- VII. **Phase analysis, mechanical properties and in vitro bioactivity of graphene nanoplatelet-reinforced silicon nitride-calcium phosphate composites**
Bozkurt D., Akarsu M. K., Akin Karadayı İ., Göller G.
JOURNAL OF ASIAN CERAMIC SOCIETIES, vol.9, no.2, pp.471-486, 2021 (SCI-Expanded)
- VIII. **Mechanical properties and oxidation behavior of spark plasma sintered (Zr, Ti)B-2 ceramics with graphene nanoplatelets**
Akarsu M. K., Akin Karadayı İ.
CERAMICS INTERNATIONAL, vol.46, no.16, pp.26109-26120, 2020 (SCI-Expanded)
- IX. **Production and characterization of TZM based TiC or ZrC reinforced composites prepared by spark plasma sintering (SPS)**
Tuzemen C., Yavaş B., Akin Karadayı İ., Yücel O., Şahin F., Göller G.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.781, pp.433-439, 2019 (SCI-Expanded)
- X. **Effects of SiC and SiC-GNP additions on the mechanical properties and oxidation behavior of NbB₂**
Akin Karadayı İ., Ocak B. C., Şahin F., Göller G.
JOURNAL OF ASIAN CERAMIC SOCIETIES, vol.7, no.2, pp.170-182, 2019 (SCI-Expanded)
- XI. **Spark plasma sintered ZrC-TiC-GNP composites: Solid solution formation and mechanical properties**
OCAK B. C., Yavaş B., Akin İ., Şahin F., Göller G.
Ceramics International, vol.44, no.2, pp.2336-2344, 2018 (SCI-Expanded)
- XII. **Microstructures and properties of silicon carbide- and graphene nanoplatelet-reinforced titanium diboride composites**
Akin Karadayı İ., Kaya Ö.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.729, pp.949-959, 2017 (SCI-Expanded)
- XIII. **Investigation of the microstructure, mechanical properties and cell viability of zirconia-toughened alumina composites reinforced with carbon nanotubes**
Akin Karadayı İ.
Journal of the Ceramic Society of Japan, vol.123, no.1437, pp.405-413, 2015 (SCI-Expanded)
- XIV. **Oxygen loss in A site deficient Sr_{0.85}La_{0.10}TiO₃ perovskite**
Akin Karadayı İ., LI M., LU Z., SINCLAIR D. C.
RSC Advances, vol.4, no.61, pp.32549-32554, 2014 (SCI-Expanded)
- XV. **Spark plasma sintered Al₂O₃-YSZ-TiO₂ composites: Processing, characterization and in vivo evaluation**
Ormanci O., AKIN İ., Şahin F., YUCEL O., SIMON V., CAVALU S., GOLLER G.
Materials Science and Engineering C, vol.40, pp.16-23, 2014 (SCI-Expanded)
- XVI. **Surface modification of alumina/zirconia ceramics upon different fluoride-based treatments**
Cavalu S., BANICA F., SIMON V., AKIN İ., Göller G.
International Journal of Applied Ceramic Technology, vol.11, no.2, pp.402-411, 2014 (SCI-Expanded)
- XVII. **Adherence properties of acrylic bone cement to alumina ceramics designed for clinical applications**
Cavalu S., Simon V., Akin İ., Goller G.
Acta Physica Polonica A, vol.125, no.2, pp.603-605, 2014 (SCI-Expanded)
- XVIII. **Improving osseointegration of alumina/zirconia ceramic implants by fluoride surface treatment**
Cavalu S., Ratiu C., Ponta O., Simon V., Rugina D., Miclaus V., Akin Karadayı İ., Göller G.
Digest Journal of Nanomaterials and Biostructures, vol.9, no.2, pp.797-808, 2014 (SCI-Expanded)
- XIX. **Oxygen-loss in A-site deficient Sr_{0.85}La_{0.10}TiO₃ perovskite**
Akin Karadayı İ., Li M., Lu Z., Sinclair D. C.
RSC ADVANCES, vol.4, no.61, pp.32549-32554, 2014 (SCI-Expanded)
- XX. **Bioactivity characterization and a full factorial design on the adhesive strength of air plasma sprayed HA-TiO₂ Coated Ti**

- Zumrut Z., Polat B., Akın Karadayı İ., Keleş Ö., Göller G.
Journal of the Australian Ceramic Society, vol.49, no.2, pp.95-103, 2013 (SCI-Expanded)
- XXI. **Adherence Properties of Acrylic Bone Cement to Alumina Ceramics Designed for Clinical Applications**
cavalu s., simon v., AKIN KARADAYI İ., Göller G.
ACTA PHYSICA POLONICA A, vol.0, 2013 (SCI-Expanded)
- XXII. **Production and characterization of hydroxyapatite-zirconia composites**
Ozmen M., Akın Karadayı İ., MARŞOĞLU M.
High Temperature Materials and Processes, vol.31, no.6, pp.749-753, 2012 (SCI-Expanded)
- XXIII. **Spark plasma sintering of B₄C-SiC composites**
Sahin F., APAK B., AKIN İ., KANBUR H. E., GENCKAN D. H., TURAN A., GOLLER G., YUCEL O.
Solid State Sciences, vol.14, no.11-12, pp.1660-1663, 2012 (SCI-Expanded)
- XXIV. **Preface**
Kayali E. S., Göller G., Akın Karadayı İ.
Key Engineering Materials, vol.493-494, 2012 (SCI-Expanded)
- XXV. **Mechanical and oxidation behavior of spark plasma sintered ZrB₂-ZrC-SiC composites**
Akin İ., Göller G.
Journal of the Ceramic Society of Japan, vol.120, no.1400, pp.143-149, 2012 (SCI-Expanded)
- XXVI. **Effect of CeO₂ addition on densification and microstructure of Al₂O₃-YSZ composites**
Akin İ., YILMAZ E., Şahin F., YUCEL O., GOLLER G.
Ceramics International, vol.37, no.8, pp.3273-3280, 2011 (SCI-Expanded)
- XXVII. **Microstructure and ferroelectric properties of spark plasma sintered Li substituted K_{0.5}Na_{0.5}NbO₃ ceramics**
Sen C., ALKAN B., AKIN İ., YUCEL O., SAHIN F. C., Göller G.
Journal of the Ceramic Society of Japan, vol.119, no.1389, pp.355-361, 2011 (SCI-Expanded)
- XXVIII. **BIOACTIVITY AND ANTIMICROBIAL PROPERTIES OF PMMA Ag₂O ACRYLIC BONECEMENT COLLAGEN COATED**
Göller G., AKIN KARADAYI İ., Simon V., Cavalu S.
DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, vol.6, no.2, pp.779-790, 2011 (SCI-Expanded)
- XXIX. **Bioactivity and antimicrobial properties of PMMA/Ag₂O acrylic bone cement collagen coated**
Cavalu S., Simon V., Göller G., Akın Karadayı İ.
Digest Journal of Nanomaterials and Biostructures, vol.6, no.2, pp.779-790, 2011 (SCI-Expanded)
- XXX. **Spectroscopic evidence of collagen electrodeposition on acrylic bone cement**
Cavalu S., Simon V., Banica F., Oswald I., Vanea E., Akın Karadayı İ., Göller G.
Studia Universitatis Babes-Bolyai Chemia, vol.56, no.3, pp.27-33, 2011 (SCI-Expanded)
- XXXI. **XRD and FTIR investigation of zirconia toughened alumina composites**
SIMON V., CAVALU S., AKIN İ., YÜCEL O., GÖLLER G.
STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA, no.1, pp.67-72, 2011 (SCI-Expanded)
- XXXII. **The Effect of Zirconia Addition on Crystallization Behaviour and Machinability of Potassium Mica and Fluorapatite Glass-Ceramics**
Ceylan U., Akın Karadayı İ., Göller G.
HIGH TEMPERATURE MATERIALS AND PROCESSES, vol.29, no.4, pp.305-311, 2010 (SCI-Expanded)
- XXXIII. **The effect of zirconia addition on crystallization behaviour and machinability of potassium mica and fluorapatite glass-ceramics**
Ceylan U., Akın Karadayı İ., Göller G.
High Temperature Materials and Processes, vol.29, no.4, pp.305-311, 2010 (SCI-Expanded)
- XXXIV. **Microstructure and densification of ZrB₂-SiC composites prepared by spark plasma sintering**
Akin İ., Hotta M., Sahin F., YUCEL O., GOLLER G., Goto T.
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.29, no.11, pp.2379-2385, 2009 (SCI-Expanded)
- XXXV. **Effect of CeO₂ addition on crystallization behavior, bioactivity and biocompatibility of potassium mica and fluorapatite based glass ceramics**
Akin İ., Göller G.

JOURNAL OF THE CERAMIC SOCIETY OF JAPAN, vol.117, no.1367, pp.787-792, 2009 (SCI-Expanded)

- XXXVI. **Effect of TiO₂ addition on crystallization and machinability of potassium mica and fluorapatite glass ceramics**

Akin İ., Goller G.

JOURNAL OF MATERIALS SCIENCE, vol.42, no.3, pp.883-888, 2007 (SCI-Expanded)

- XXXVII. **In vitro bioactivity characterization of sodium potassium mica and fluorapatite containing glass ceramics**

GÖLLER G., çekli c., AKIN KARADAYI İ., Demirkese E.

Bioceramics, vol.19, pp.188-185, 2007 (SCI-Expanded)

- XXXVIII. **In vitro bioactivity characterization of machinable glass ceramics containing 85wt Na mica and 15wt fluorapatite**

GÖLLER G., AKIN KARADAYI İ., kahraman a., Demirkese E., ÜRGEN M. K.

BIOCERAMICS 18, vol.0, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **Vücutta kullanılan seramikler**
AKIN İ., GÖLLER G.
Standard-Ekonomik ve Teknik Dergi, no.598, 2012 (Non Peer-Reviewed Journal)
- II. **Effect of CeO₂ addition on in-vitro bioactivity properties of K-mica-fluorapatite based glass ceramics**
Göller G., Akin Karadayı İ.
Key Engineering Materials, vol.361-363 I, pp.261-264, 2008 (Scopus)
- III. **In-vitro bioactivity characterization of K-mica-fluorapatite based glass ceramics containing varying amount of TiO₂ addition**
Göller G., Akin Karadayı İ., Eruslu N., Kayali E. S.
Key Engineering Materials, vol.309-311 I, pp.321-324, 2006 (Scopus)

Books & Book Chapters

- I. **Spark Plasma Sintering of Zirconia-Toughened Alumina Composites and Ultra-High Temperature Ceramics Reinforced with Carbon Nanotubes**
Akin Karadayı İ., Göller G.
in: Research and Innovation in Carbon Nanotube-Based Composites, Attaf B., Editor, The World Academic Publishing Co. Ltd, Hongkong, pp.215-218, 2015
- II. **Processing Technologies for Bioceramic Based Composites**
Akin Karadayı İ., Göller G.
in: Handbook of Bioceramics and Biocomposites, Antoniac I.V., Editor, Springer International Idea Group Publishing (Igp), İsviçre, pp.639-666, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **PRODUCTION AND CHARACTERIZATION OF ZrC-TiC-1CNTCOMPOSITES WITH ADDITIONAL VARYING AMOUNTS OF GNP PREPARED BY SPARK PLASMA SINTERING METHOD**
Yıldız M., YÜCEL O., AKIN KARADAYI İ., ŞAHİN F., GÖLLER G.
International Materials Technologies and Metallurgy Conference 2019, 31 October - 01 November 2019
- II. **PRODUCTION AND CHARACTERIZATION OF BORON CARBIDE-3.5 CARBON NANOTUBE COMPOSITES WITH ADDITIONAL VARYING AMOUNTS OF GRAPHENE NANOPATELET PREPARED BY SPS**
BALCI E., YÜCEL O., AKIN KARADAYI İ., ŞAHİN F., GÖLLER G.

International Materials Technologies and Metallurgy Conference 2019, 31 October - 01 November 2019

- III. **Investigation the oxidation resistance of TZM alloy prepared by spark plasma sintering**
YAVAŞ B., AKIN KARADAYI İ., YÜCEL O., ŞAHİN F., GÖLLER G.
19th International Metallurgy and Materials Congress, 25 - 27 October 2018
- IV. **Investigation of Li Addition on Physical and Electrical Properties of KNN Ceramics via Spark Plasma Sintering**
Özmen M. K., YAVAŞ B., AKIN KARADAYI İ., YÜCEL O., ŞAHİN F., GÖLLER G.
19th International Metallurgy and Materials Congress, 25 - 27 October 2018, pp.470-473
- V. **Effect of GNP-CNT (GNT) Addition on Properties of ZRC-TiC Composites Prepared by Spark Plasma Sintering**
Ocak B. Ç., YAVAŞ B., AKIN KARADAYI İ., YÜCEL O., ŞAHİN F., GÖLLER G.
19th International Metallurgy and Materials Congress, 25 - 27 October 2018, pp.450-453
- VI. **Reactive Spark Plasma Sintering of TaB₂ Ceramics**
Kaplan M., YÜCEL O., ŞAHİN F., GÖLLER G., AKIN KARADAYI İ.
19th International Metallurgy and Materials Congress, 25 - 27 October 2018, pp.458-461
- VII. **Investigation the Oxidation Resistance of TZM Alloy Prepared by Spark Plasma Sintering Method**
YAVAŞ B., AKIN KARADAYI İ., YÜCEL O., ŞAHİN F., GÖLLER G.
19th International Metallurgy and Materials Congress, 25 - 27 October 2018, pp.454-457
- VIII. **Production and Development of AlON Ceramics with Various Additives by Reactive Spark Plasma Sintering**
ŞAHİN F., YÜCEL O., GÖLLER G., AKIN KARADAYI İ., YAVAŞ B., AYDOĞMUŞ D., Kaçar M., Semerciöz S. M., Atay M., Güler A. H.
19th International Metallurgy and Materials Congress, 25 - 27 October 2018, pp.416-419
- IX. **Mechanical Properties and Oxidation Behavior of TiB₂-GNP Composites**
OCAK B. Ç., ŞAHİN F., GÖLLER G., AKIN KARADAYI İ.
19th International Metallurgy and Materials Congress, 25 - 27 October 2018
- X. **Synthesis of TaB₂ ceramics by reduction of Ta₂O₅ with B₄C**
kaplan m., GÖLLER G., ŞAHİN F., YÜCEL O., AKIN KARADAYI İ.
Materials Science and Technology 2018, Columbus, United States Of America, 14 - 18 October 2018
- XI. **Production and characterization of spark plasma sintered hybrid GNT reinforced ZrC-TiC composites**
Ocak B. Ç., YAVAŞ B., AKIN KARADAYI İ., YÜCEL O., ŞAHİN F., GÖLLER G.
Materials Science and Technology 18, Columbus, United States Of America, 14 - 18 October 2018
- XII. **Production and Characterization of TZM Based TiC or ZrC Reinforced Composites Prepared by Spark Plasma Sintering**
Tüzemen C., YAVAŞ B., AKIN KARADAYI İ., GÜRMEEN S., YÜCEL O., ŞAHİN F., GÖLLER G.
MST 2018, 11 - 15 March 2018
- XIII. **Investigation of the properties of carbon nanotube reinforced ZrC-ZrB₂ composites**
ORMANCI ÖZTÜRK Ö., AKIN KARADAYI İ., YÜCEL O., ŞAHİN F., GÖLLER G.
International Materials Technologies and Metallurgy Conference 2017, 26 - 27 October 2017
- XIV. **Microstructure and mechanical properties of NbB₂/SiC-GNP composites**
Ocak B. Ç., Şahin F., Göller G., Akın Karadayı İ.
The 15th Conference & Exhibition of the European Ceramic Society (ECerS2017), Budapeşte, Hungary, 10 - 14 July 2017, pp.55
- XV. **Fracture toughness properties of spark plasma sintered boron carbide ceramics using Ti and TiO₂**
Güney B., Ara R., E F. D., Apak B., Akın Karadayı İ., Göller G., Yücel O., Şahin F.
The 15th Conference & Exhibition of the European Ceramic Society (ECerS2017), Budapeşte, Hungary, 10 - 14 July 2017, pp.36
- XVI. **Effect of SiC addition on oxidation behavior and mechanical properties of TiB₂ and NbB₂**
AKIN KARADAYI İ., ŞAHİN F., YÜCEL O., GÖLLER G.
39th International Conference & Exposition on Advanced Ceramics & Composites, 25 - 29 January 2015
- XVII. **Effect of Particle Size and Heating Rate on Densification, Microstructure and Mechanical Properties**

of B4C Ceramics

Yavaş B., Akın Karadayı İ., Şahin F., Yücel O., Göller G.

Materials Science & Technology, 2014 Conference & Exhibition (MS&T'14), Pittsburg, United States Of America, 12 - 16 October 2014, pp.148

XVIII. **Titania versus Ceria alumina/zirconia composites: structural aspects and biological tolerance**

Cavalu S., Simon V., Ratiu C., Rus V., Akın Karadayı İ., Göller G.

24th Symposium and Annual Meeting of International Society for Ceramics in Medicine (ISCM 2012), Fukuoka, Japan, 21 - 24 October 2012, pp.595-596

XIX. **MECHANICAL PROPERTIES OF SPARK PLASMA SINTERED ZrC-SiC COMPOSITES**

Sagdic S., Akın Karadayı İ., Şahin F., Yücel O., Göller G.

Symposium on Materials Processing and Interfaces from 141st TMS Annual Meeting and Exhibition, California, United States Of America, 11 - 15 March 2012, pp.569-575

XX. **Improving the bioactivity and biocompatibility of acrylic cements by collagen coating**

Cavalu S., Simon V., Akın Karadayı İ., Göller G.

23rd Symposium and Annual Meeting of International Society for Ceramics in Medicine, ISCM 2011, İstanbul, Turkey, 6 - 09 November 2011, vol.493-494, pp.391-396

XXI. **Correlation between structural properties and in vivo biocompatibility of alumina/zirconia bioceramics**

Cavalu S., Simon V., Ratiu C., Oswald I., Gabor R., Ponta O., Akın Karadayı İ., Göller G.

23rd Symposium and Annual Meeting of International Society for Ceramics in Medicine, ISCM 2011, İstanbul, Turkey, 6 - 09 November 2011, vol.493-494, pp.1-6

XXII. **Effect of CeO₂ addition on in-vitro bioactivity properties of K-Mica-Fluorapatite based glass ceramics**

Göller G., Akın Karadayı İ.

20th International Symposium on Ceramics in Medicine, Nantes, France, 24 - 26 October 2007, pp.261-262

XXIII. **In-vitro bioactivity characterization of sodium-potassium mica and fluorapatite containing glass ceramics**

Göller G., Cekli C., Akın Karadayı İ., Demirkesen E.

19th International Symposium on Ceramics in Medicine, Chengdu, China, 10 - 13 October 2006, pp.185-186

Supported Projects

Akın Karadayı İ., TUBITAK Project, Sol-Jel Yöntemi ile $Ti_{x+1}SiC_x$ ve $Ti_{y+1}AlC_y$ MAX Fazı Hammaddelerinin Sentezlenmesi, Biyo inert Seramik-MAX Kompozitlerinin Üretimi ve Karakterizasyonu, 2022 - 2025

Akın Karadayı İ., Project Supported by Higher Education Institutions, SiC katkılı CrB₂ Kompozitlerinin Spark Plazma Sinterleme SPS Yöntemi ile Üretimi ve Karakterizasyonu, 2023 - 2024

Akın Karadayı İ., Kayar B. E., Project Supported by Higher Education Institutions, Grafen ve Bor Nitrür Katkılarının Titanyum Diborür-Titanyum Karbür Kompozitlerinin Özellikleri Üzerine Etkilerinin İncelenmesi, 2021 - 2023

Akın Karadayı İ., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Silisyum Karbür ve Bor Nitrür Katkılı Yüksek Sıcaklık Borürlerinin Spark Plazma Sinterleme Yöntemi ile Üretimi ve Karakterizasyonu, 2021 - 2023

Akın Karadayı İ., Kaplan M., Project Supported by Higher Education Institutions, Borür Katı Çözeltilerin Spark Plazma Sinterleme (SPS) Yöntemi ile Üretimi ve Karakterizasyonu, 2019 - 2022

Akın Karadayı İ., Aslan C., Project Supported by Higher Education Institutions, İki Boyutlu BN İlavasının TiB₂-SiC ve ZrB₂-SiC Kompozitlerinin Mekanik Özellikleri Üzerine Etkisinin İncelenmesi, 2020 - 2021

Akın Karadayı İ., Göller G., Şahin F., Project Supported by Higher Education Institutions, Reaktif Sinterleme Yöntemi ile Tantalyum Borür ve Tantalyum Borür-Grafen Nano Plaka Kompozitlerinin Üretimi ve Karakterizasyonu, 2017 - 2021

Akın Karadayı İ., Project Supported by Higher Education Institutions, Biyomalzeme Uygulamalarına Yönelik Si₃N₄-HA-GNP Kompozitlerinin Üretimi ve Karakterizasyonu, 2018 - 2020

Akın Karadayı İ., TUBITAK Project, Silisyum Karbür ve Grafen Nano Partikül İlaveleri ile Titanyum Diborür ve Niyobyum Diborür Seramiklerinin Kırılma Tokluğu ve Oksidasyon Direncinin İyileştirilmesi, 2016 - 2018

Akın Karadayı İ., Project Supported by Higher Education Institutions, Grafen ile Güçlendirilmiş Al₂O₃-YSZ Kompozitlerinin Üretimi ve Karakterizasyonu, 2015 - 2017

Akın Karadayı İ., Project Supported by Higher Education Institutions, Silisyum Karbür ve Grafen Nano Partikül İlaveleri ile Titanyum Diborür Seramiklerinin Kırılma Tokluğu ve Oksidasyon Direncinin İyileştirilmesi, 2015 - 2016

Akın Karadayı İ., Project Supported by Higher Education Institutions, Al₂O₃-YSZ-CNT Kompozitlerinin Spark Plazma Sinterleme Yöntemi ile Üretimi ve Karakterizasyonu, 2012 - 2015

Akın Karadayı İ., TUBITAK Project, Dental ve Ortopedik Uygulamalara Yönelik Yeni Nesil Alumina Zirkonya Kompozitleri Üretim Karakterizasyon In Vitro ve In Vivo Testler, 2012 - 2014

Akın Karadayı İ., TUBITAK Project, Diş ve Ortopedik İmplantlar İçin Antimikrobiyal Aktivite ile Yeni Akrilik Sementler, 2010 - 2011

Akın Karadayı İ., TUBITAK Project, ZrB₂ Esaslı Kompozitlerin Spark Plazma Sinterleme SPS Yöntemi ile Üretimi ve Karakterizasyonu, 2009 - 2011

Akın Karadayı İ., TUBITAK Project, Isı Kalkanı Uygulamaları İçin Malzeme Proses Teknolojileri Geliştirme Projesi, 2007 - 2010

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Non Academic Experience

The University of Sheffield

Tohoku University