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Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Makine Mühendisliği, Turkey 2012 - 2017

Postgraduate, Marmara University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (İngilizce), Turkey 2008 - 2012

Undergraduate, Marmara University, Mühendislik Fakültesi, Makine Mühendisliği (İngilizce), Turkey 2003 - 2008

Foreign Languages

English, C1 Advanced

Research Areas

Mechanical Engineering, Construction and Manufacturing, Material, Metallurgical and Materials Engineering, Material science and engineering, Testing and Control of Materials, Mechanical Properties, Material Characterization, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2019 - Continues

Assistant Professor, Bayburt University, Mühendislik Fakültesi, Makine Mühendisliği, 2017 - 2019

Research Assistant, Bayburt University, Mühendislik Fakültesi, Makine Mühendisliği, 2011 - 2017

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

- I. **Microstructural, mechanical and tribological characterization of Cu-Co-Ni-Be alloy processed via equal channel angular pressing**
DEMİRTAŞ M.
MATERIALS TODAY COMMUNICATIONS, vol.28, 2021 (Journal Indexed in SCI)
- II. **The mechanical compression performance of ultra-fine grained stainless steel pyramidal lattice core**
Kuleyin H., GÜMRÜK R., YANAR H., DEMİRTAS M., PÜRÇEK G.
MECHANICS OF ADVANCED MATERIALS AND STRUCTURES, vol.28, no.10, pp.1073-1078, 2021 (Journal Indexed in SCI)
- III. **Optimization of strength, ductility and wear resistance of low-carbon grade A shipbuilding steel by post-ECAP annealing**
DEMİRTAŞ M., Sekban D. M.
METALLURGICAL RESEARCH & TECHNOLOGY, vol.118, no.2, 2021 (Journal Indexed in SCI)
- IV. **Microstructural, mechanical and tribological properties of ultrafine-grained Cu-Cr-Zr alloy**

processed by high pressure torsion

Purcek G., Yanar H., Demirtas M., Shangina D. V. , Bochvar N. R. , Dobatkin S. V.

Journal of Alloys and Compounds, vol.816, 2020 (Journal Indexed in SCI Expanded)

- V. **Effect of resin content on tribological behavior of brake pad composite material**
YANAR H., Ayar H. H. , Demirtas M., PÜRÇEK G.
INDUSTRIAL LUBRICATION AND TRIBOLOGY, vol.72, no.2, pp.195-202, 2020 (Journal Indexed in SCI)
- VI. **Room Temperature Superplasticity in Fine/Ultrafine Grained Materials Subjected to Severe Plastic Deformation**
Demirtas M., Purcek G.
MATERIALS TRANSACTIONS, vol.60, no.7, pp.1159-1167, 2019 (Journal Indexed in SCI)
- VII. **High temperature superplasticity and deformation behavior of naturally aged Zn-Al alloys with different phase compositions**
Demirtas M., Kawasaki M., YANAR H., PÜRÇEK G.
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.730, pp.73-83, 2018 (Journal Indexed in SCI)
- VIII. **Effect of grain refinement and phase composition on room temperature superplasticity and damping capacity of dual-phase Zn-Al alloys**
Demirtas M., Atli K. C. , YANAR H., Purce G.
JOURNAL OF MATERIALS RESEARCH, vol.33, no.8, pp.1032-1045, 2018 (Journal Indexed in SCI)
- IX. **Influence of high pressure torsion-induced grain refinement and subsequent aging on tribological properties of Cu-Cr-Zr alloy**
PÜRÇEK G., YANAR H., Shangina D. V. , Demirtas M., Bochvar N. R. , Dobatkin S. V.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.742, pp.325-333, 2018 (Journal Indexed in SCI)
- X. **Enhancing the Damping Behavior of Dilute Zn-0.3Al Alloy by Equal Channel Angular Pressing**
Demirtas M., Atli K. C. , YANAR H., PÜRÇEK G.
METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, no.6, pp.2868-2876, 2017 (Journal Indexed in SCI)
- XI. **Optimization of RT superplasticity of UFG Zn-22Al alloy by applying ECAP at different temperatures and phase regions**
DEMİRTAŞ M., YANAR H., PÜRÇEK G.
IOP Conf. Series: Materials Science and Engineering, vol.194, pp.1-6, 2017 (Journal Indexed in SCI)
- XII. **Effects of grain size on room temperature deformation behavior of Zn-22Al alloy under uniaxial and biaxial loading conditions**
Cetin M. E. , Demirtas M., SOFUOĞLU H., CORA Ö. N. , PÜRÇEK G.
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.672, pp.78-87, 2016 (Journal Indexed in SCI)
- XIII. **Effect of different processes on lamellar-free ultrafine grain formation, room temperature superplasticity and fracture mode of Zn-22Al alloy**
Demirtas M., PÜRÇEK G., YANAR H., Zhang Z. J. , Zhang Z. F.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.663, pp.775-783, 2016 (Journal Indexed in SCI)
- XIV. **Optimization of strength, ductility and electrical conductivity of Cu-Cr-Zr alloy by combining multi-route ECAP and aging**
PÜRÇEK G., YANAR H., Demirtas M., ALEMDAĞ Y., Shangina D. V. , Dobatkin S. V.
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.649, pp.114-122, 2016 (Journal Indexed in SCI)
- XV. **Effect of equal-channel angular pressing on room temperature superplasticity of quasi-single phase Zn-0.3Al alloy**
Demirtas M., PÜRÇEK G., YANAR H., Zhang Z. J. , Zhang Z. F.
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.644, pp.17-24, 2015 (Journal Indexed in SCI)
- XVI. **Achieving room temperature superplasticity in Zn-5Al alloy at high strain rates by equal-channel**

angular extrusion

Demirtas M., PÜRÇEK G., YANAR H., Zhang Z. J. , Zhang Z. F.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.623, pp.213-218, 2015 (Journal Indexed in SCI)

XVII. Improvement of high strain rate and room temperature superplasticity in Zn-22Al alloy by two-step equal-channel angular pressing

Demirtas M., PÜRÇEK G., YANAR H., Zhang Z. J. , Zhang Z. F.

MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.620, pp.233-240, 2015 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **PROCESSING OF GRADE A LOW CARBON STEEL BY EQUAL CHANNEL ANGULAR PRESSING**
DEMİRTAŞ M.
Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.9, no.1, 2020 (Other Refereed National Journals)
- II. **Effect of long-term natural aging on microstructure and room temperature superplastic behavior of UFG/FG Zn-Al alloys processed by ECAP**
DEMİRTAŞ M., YANAR H., PÜRÇEK G.
LETTERS ON MATERIALS, vol.8, no.4, pp.532-537, 2018 (Journal Indexed in ESCI)
- III. **Experimental and Numerical Investigation of Thickness Distribution in Forming of Superplastic Zn-22Al Alloy**
ÇETİN M. E. , DEMİRTAŞ M., PÜRÇEK G., CORA Ö. N. , SOFUOĞLU H.
Academic Perspective Procedia, vol.1, no.1, pp.1034-1040, 2018 (Refereed Journals of Other Institutions)
- IV. **Room Temperature Superplasticity in Fine/Ultrafine-Grained Zn-Al Alloys with Different Phase Compositions**
DEMİRTAŞ M., YANAR H., SARAY O., PÜRÇEK G.
Defect and Diffusion Forum, vol.385, pp.72-77, 2018 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **Mechanical and Tribological Behavior of Al-Si Alloy Processed via Two-Step ECAP**
DEMİRTAŞ M.
2. International Conference on Materials Science, Mechanical and Automotive Engineerings And Technology, 21 - 23 June 2019
- II. **Mechanical Properties of Low Carbon Steel Processed by Equal Channel Angular Pressing**
DEMİRTAŞ M.
Fourth International Iron and Steel Symposium (UDCS'19), 4 - 06 April 2019
- III. **Experimental and numerical investigation of thickness distribution in forming of superplastic Zn-22Al alloy**
ÇETİN M. E. , DEMİRTAŞ M., PÜRÇEK G., CORA Ö. N. , SOFUOĞLU H.
6th international semposium on innovative technologies in engineering and science, 9 - 11 November 2018
- IV. **Effect of Resin Content on Friction and Wear Behaviour of NonAsbestos Composite Friction Material Used in Brake Pad**
YANAR H., AYAR H. H. , DEMİRTAŞ M., PÜRÇEK G.
2th International Conference On Tribology (Turkeytrib'18), 18 - 20 April 2018
- V. **A New Multi-Functional Tribometer: Application of Block-on-Ring Test Module**
YANAR H., DEMİRTAŞ M., PÜRÇEK G.
2th International Conference On Tribology (Turkeytrib'18), 10 - 20 April 2018
- VI. **Room temperature superplasticity in fine/ultrafine-grained Zn-Al alloys with different phase compositions**

Demirtas M., YANAR H., Saray O., PÜRÇEK G.

13th International Conference on Superplasticity in Advanced Materials, ICSAM 2018, Petersburg, Russia, 19 - 22 August 2018, pp.72-77

- VII. **Effect of Grain Size on Microhardness of Superplastic Zn-22Al**
ÇETİN M. E. , DEMİRTAŞ M., SOFUOĞLU H., CORA Ö. N. , PÜRÇEK G.
International Conference on Engineering Technologies, 7 - 09 December 2017
- VIII. **İki aşamalı hadde işlemine tabi tutulan Zn-Al alaşımlarında oda sıcaklığında süperplastisite-benzeri davranış**
DEMİRTAŞ M., YANAR H., PÜRÇEK G.
International Conference on Advanced Engineering Technologies, Bayburt Türkiye, 21 - 23 September 2017
- IX. **Severe Plastic Deformation Induced Dynamic Precipitation in Cu-Cr-Zr Alloy**
YANAR H., PÜRÇEK G., DEMİRTAŞ M., SHANGINA D., DOBATKIN S.
EUROMAT2017, European Congress and Exhibition on Advanced Materials and Processes, 17 - 22 September 2017
- X. **Relationship Between Superplasticity and Damping Capacity in Naturally Aged Zn-Al Alloys**
DEMİRTAŞ M., ATLI K. C. , YANAR H., PÜRÇEK G.
European Congress and exhibition on advanced materials and processes EUROMAT 2017, Thessaloniki, Greece, 17 - 22 September 2017
- XI. **Superplastic behaviors of severely deformed and naturally aged Zn-Al alloys at room and elevated temperatures**
DEMİRTAŞ M., MEGUMİ K., YANAR H., PÜRÇEK G.
European Congress and Exhibitaion on Advanced Materials and Processes (EUROMAT 2017), Thessaloniki, Greece, 12 - 17 September 2017
- XII. **A new multifunctional tribometer with high temperature module**
YANAR H., DEMİRTAŞ M., PÜRÇEK G.
9th INTERNATIONAL CONFERENCE ON TRIBOLOGY BALKANTRIB'17, Kapadokya Nevşehir, 13 - 15 September 2017
- XIII. **Effect of Fiber Content on the Friction and Wear Performance of Non-asbestos Composites Used in Brake Pads**
YANAR H., DEMİRTAŞ M., AYAR H., PÜRÇEK G.
9th INTERNATIONAL CONFERENCE ON TRIBOLOGY, BALKANTRIB'17, Kapadokya Nevşehir, 13 - 15 September 2017
- XIV. **Effect of testing temperature on tribological properties of a Cu-Cr-Zr alloy in different microstructural conditions**
YANAR H., SHANGINA D. V. , DEMİRTAŞ M., DOBATKIN S. V. , PÜRÇEK G.
9th INTERNATIONAL CONFERENCE ON TRIBOLOGY, BALKANTRIB'17, Kapadokya Nevşehir, 13 - 15 September 2017
- XV. **EFFECT OF HEXAGONAL BORON NITRIDE (H-BN) ADDITION ON THE FRICTION AND WEAR CHARACTERISTICS OF NON-ASBESTOS COMPOSITES USED IN BRAKE PADS**
YANAR H., AYAR H., DEMİRTAŞ M., PÜRÇEK G.
IX IBERIAN CONFERENCE on TRIBOLOGY, GUIMARÃES, PORTUGAL, 12 - 13 June 2017
- XVI. **EFFECT OF ACCUMULATIVE STRAIN ON ROOM TEMPERATURE SUPERPLASTICITY OF DILUTE ZN 0 3AL ALLOY**
DEMİRTAŞ M., YANAR H., PÜRÇEK G.
16th International Materials Symposium IMSP'2016, 12 - 14 October 2016
- XVII. **Effect of natural aging on RT and HSR superplasticity of ultrafine grained Zn-22Al alloy**
Demirtas M., PÜRÇEK G., YANAR H., ZHANG Z., Zhang Z.
12th International Conference on Superplasticity in Advanced Materials, ICSAM 2015, Tokyo, Japan, 7 - 11 September 2015, pp.320-325
- XVIII. **Effect of Natural Aging on RT and HSR Superplasticity Of Ultrafine Grained Zn 22al Alloy**
DEMİRTAŞ M., PÜRÇEK G., YANAR H., ZHANG Z., ZHANG Z.
12th International Conference on Superplasticity in Advanced Materials (ICSAM) 2015, Tokyo, Japan, 7 - 11

September 2015

- XIX. **Süperplastik Zn 22al Alaşımında Ultra İnce Tane Oluşumunun Oda Sıcaklığındaki Şekillendirilebilirliğe Etkisinin Deneysel Ve Teorik Olarak İncelenmesi**
ÇETİN M. E. , DEMİRTAŞ M., SOFUOĞLU H., CORA Ö. N. , PÜRÇEK G.
19. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015
- XX. **High strain rate superplasticity at room temperature in two phase and quasi single phase Zn Al alloys**
DEMİRTAŞ M., PÜRÇEK G., YANAR H., ZHANG Z., ZHANG Z.
NanoSPD-6 (Nanomaterials by Severe Plastic Deformation), Matez, France, 30 June - 04 July 2014
- XXI. **Improvement in Room Temperature Damping Capacity of Zn 22Al Alloy by Ultrafine Grain Formation**
DEMİRTAŞ M., PÜRÇEK G., YANAR H., ZHANG Z., ZHANG Z.
NanoSPD-6 (Nanomaterials by Severe Plastic Deformation), Metz, France, 30 June - 04 July 2014

Citations

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