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International Researcher IDs

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Education Information

Doctorate, University of Illinois at Urbana-Champaign, Graduate College, Metallurgy & Mining Engineering , United States Of America 1980 - 1987

Postgraduate, University of Illinois at Urbana-Champaign, Graduate College, Metallurgy & Mining Engineering , United States Of America 1979 - 1980

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Metallurgical And Materials Engineering, Turkey 1973 - 1978

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, A study of the kinetics of phase separation in a Ni-12.5 at.% Si alloy, University of Illinois at Urbana-Champaign, Graduate School, Metallurgical Engineering, 1987

Research Areas

Metallurgical and Materials Engineering, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Kocaeli University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2016 - 2022

Assistant Professor, Kocaeli University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2002 - 2016

Research Assistant, University of Illinois at Urbana-Champaign, Graduate School, 1983 - 1987

Academic and Administrative Experience

Head of the Department Follow-up Committee for Engineering Profession Education, Kocaeli University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2017 - 2022

Erasmus Program Department Coordinator, Kocaeli University, Metalurji Ve Malzeme Mühendisliği Bölümü, 2004 - 2022
Deputy Head of Department, Kocaeli University, Metalurji Ve Malzeme Mühendisliği Bölümü, 2004 - 2015

Courses

Advanced Material Characterization, Doctorate, 2021 - 2022
Engineering Profession Education, Undergraduate, 2021 - 2022
Materials Characterization, Undergraduate, 2021 - 2022
Polymer Materials, Undergraduate, 2021 - 2022
Project Management in Engineering, Undergraduate, 2021 - 2022
Materials Science II, Undergraduate, 2019 - 2020
Advanced Rubber Technology, Postgraduate, 2018 - 2019
Statistical Applications in Engineering, Undergraduate, 2019 - 2020
Material and Energy Balance, Undergraduate, 2017 - 2018
Elastomer Technology, Undergraduate, 2015 - 2016
Physical Metallurgy, Undergraduate, 2012 - 2013
Advanced Elastomer Metal Composites, Doctorate, 2010 - 2011
Materials Science I, Undergraduate, 2008 - 2009

Advising Theses

Polat Ş., Investigation of alternative rubber-metal adhesion systems in automotive suspension bushings, Postgraduate, F.ERDEM(Student), 2022
Polat Ş., Development of ductile cast irons by alloying for use in exhaust manifolds, Doctorate, G.AKTAŞ(Student), 2020
Polat Ş., Production of silicon nitride based biomaterials by tape casting method for artificial bone applications and their characterisation, Doctorate, Y.TABAK(Student), 2018
Polat Ş., Rheological optimization of water based silicon nitride tape casting suspensions for biomaterial production, Postgraduate, H.ÜNSAL(Student), 2018
Polat Ş., Improvement of the antibacterial properties and osteoconductivity of PEEK based spinal implants by nano structured coatings, Doctorate, S.GÜMÜŞ(Student), 2017
Polat Ş., Surface treatment processes and tribological characterization of hot work tool steels used as die material in aluminum extrusion, Postgraduate, G.AKTAŞ(Student), 2014
Polat Ş., Evaluation of the mechanical and electrical properties of precipitation hardened copper alloys, Postgraduate, G.SULTAN(Student), 2014
Polat Ş., Development of a boron added armor steel along the principles of physical metallurgy and evaluation of its ballistic performance, Doctorate, Ş.HAKAN(Student), 2011
Polat Ş., Improving the surface properties and investigating the corrosion behavior of cast iron tubes coated by arc spray technique, Postgraduate, A.KAYA(Student), 2010
Polat Ş., Production and evaluation of ballistic performance of ceramic reinforced polymer matrix composites, Postgraduate, İ.ÖZLEM(Student), 2009
Polat Ş., Fiber reinforced polymer matrix composites for ballistic applications, Postgraduate, Ö.MEMİŞ(Student), 2009
Polat Ş., Characterization of electrical arc furnace slag to be used as grit material, Postgraduate, F.GÜNDOĞAN(Student), 2008
Polat Ş., The characterization of metallic materials by using X-ray diffraction (XRD) and energy dispersive spectrometer (EDS) methods, Postgraduate, E.KURUTLU(Student), 2006

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of adhesion and tribological performance of CrN, AlTiN and CrN/AlTiN coated X45CrMoV5-3-1 tool steel**
Aktaş Çelik G., Fountas K., Atapek Ş. H., Kamoutsis E., Polat Ş., Zervaki A.
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.31, no.9, pp.1-39, 2023 (SCI-Expanded)
- II. **Homogenization effect on precipitation kinetics and mechanical properties of an extruded AA7050 alloy**
ATAPEK Ş. H., Eker I., KAHRIMAN F., POLAT Ş.
MATERIALS TESTING, vol.64, no.10, pp.1455-1464, 2022 (SCI-Expanded)
- III. **Homogenization effect on precipitation kinetics and mechanical properties of extruded AA7050 alloy**
Atapek Ş. H., Eker İ., Kahrıman F., Polat Ş.
MATERIALPRUEFUNG/MATERIALS TESTING, vol.64, no.10, pp.1455-1464, 2022 (SCI-Expanded)
- IV. **Thermal and mechanical analyses of an EN AW 6082 alloy with static and dynamic precipitations**
Atapek Ş. H., Erdoğan Y. A., Kahrıman F., Kaya H., Polat Ş.
MATERIALS TESTING, vol.64, no.7, pp.1002-1011, 2022 (SCI-Expanded)
- V. **Hot Oxidation Resistance of a Novel Cast Iron Modified by Nb and Al Addition for Exhaust Manifold Applications**
Celik G. A., ATAPEK Ş. H., POLAT Ş., Tzini M. T., Haidemenopoulos G. N.
METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, vol.53, no.6, pp.1991-2003, 2022 (SCI-Expanded)
- VI. **SIMULATION AND ANALYSIS OF THE SOLIDIFICATION CHARACTERISTICS OF A Si-Mo DUCTILE IRON**
Celik G., Tzini M., Polat Ş., Aristeidakis J., Atapek Ş. H., Sarafoglou P., Haidemenopoulos G. N.
JOURNAL OF MINING AND METALLURGY SECTION B-METALLURGY, vol.57, no.1, pp.53-62, 2021 (SCI-Expanded)
- VII. **Thermal and microstructural characterization of a novel ductile cast iron modified by aluminum addition**
Çelik G. A., Tzini M. T., Polat Ş., Atapek Ş. H., Haidemenopoulos G. N.
International Journal of Minerals, Metallurgy and Materials, vol.27, no.2, pp.190-199, 2020 (SCI-Expanded)
- VIII. **Characterization of medieval glazed ceramics of the East Plain Cilicia survey**
Tülek F., Aktaş Çelik G., Atapek Ş. H., Polat Ş.
Journal of Archaeological Science: Reports, vol.29, 2020 (AHCI)
- IX. **Effect of Single and Duplex Thin Hard Film Coatings on the Wear Resistance of 1.2343 Tool Steel**
Celik G., Polat Ş., Atapek Ş. H.
Transactions of the Indian Institute of Metals, vol.71, no.2, pp.411-419, 2018 (SCI-Expanded)
- X. **Tribological behavior of CrN-coated Cr-Mo-V steels used as die materials**
CELİK G., POLAT Ş., ATAPEK Ş. H.
International Journal of Minerals, Metallurgy and Materials, vol.24, no.12, pp.1394-1402, 2017 (SCI-Expanded)
- XI. **Microstructural and mechanical characterization of the parabolic spring steel 51CrV4**
KOMEÇ A., DIKCI K., ATAPEK Ş. H., POLAT Ş., CELİK G.
Materialpruefung/Materials Testing, vol.59, no.11-12, pp.997-1002, 2017 (SCI-Expanded)
- XII. **Biodegradation of anti-microbial titanium-magnesium-silver coatings on polyetheretherketone for bone-contact applications**
Gümüş S., Polat Ş., Waldhauser W., Lackner J. M.
SURFACE & COATINGS TECHNOLOGY, vol.320, pp.503-511, 2017 (SCI-Expanded)
- XIII. **A case study of a stress corrosion cracking failure in an AA5083 mold material used for curing rubber compounds**
Alkan A., GÜMÜŞ S., Atapek A. H., POLAT Ş.
Protection of Metals and Physical Chemistry of Surfaces, vol.52, no.6, pp.1100-1105, 2016 (SCI-Expanded)
- XIV. **TRIBO-CORROSION BEHAVIOR OF CAST AND SELECTIVE LASER MELTED Co-Cr ALLOY FOR DENTAL APPLICATIONS**
Atapek Ş. H., Dikova T., Aktaş Çelik G., Polat Ş., Dzhendov D., Pavlova D., Simov M.
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURING, no.12, pp.61-64, 2016 (SCI-Expanded)

- XV. **Fractographical analysis of fatigue failed Cu-2.55Ni-0.55Si alloy**
ATAPEK Ş. H., Pantelakis S. G., POLAT Ş., Chamos A. N., AKTAS G.
Theoretical and Applied Fracture Mechanics, vol.83, pp.60-66, 2016 (SCI-Expanded)
- XVI. **Wear behavior of surface treated X45MoCrV5-3-l tool steel at room and elevated temperatures**
Aktas G., Polat Ş., Atapek S. H.
Acta Physica Polonica A, vol.127, no.4, pp.1221-1224, 2015 (SCI-Expanded)
- XVII. **The Correlation Between Elastic Properties and AFM Images of Nanocoatings on Polymers**
GÜMÜŞ S., POLAT Ş., LACKNER J. M., WALDHAUSER W.
ACTA PHYSICA POLONICA A, vol.127, no.4, pp.1142-1144, 2015 (SCI-Expanded)
- XVIII. **Microstructural and mechanical characterization of electric arc furnace (EAF) slag for use as abrasive grit material**
Polat Ş., Kahnman F.
Materialprüfung/Materials Testing, vol.57, no.3, pp.245-251, 2015 (SCI-Expanded)
- XIX. **Determination of the Microstructure of Powder Tool Steels by Different Etching Techniques**
Atapek S. H., POLAT Ş., GÜMÜŞ S., ERİŞİR E., Altug G. S.
METAL SCIENCE AND HEAT TREATMENT, vol.56, no.3-4, pp.152-158, 2014 (SCI-Expanded)
- XX. **Effects of Microstructure and Processing Defects on the Tensile and Impact Fracture Behavior of Welded Bainitic Steel**
ATAPEK Ş. H., POLAT Ş.
METAL SCIENCE AND HEAT TREATMENT, vol.56, no.1-2, pp.103-107, 2014 (SCI-Expanded)
- XXI. **Growth of biomimetic films - influences of polymer topography and phase structure**
Lackner J. M., GÜMÜŞ S., POLAT Ş., Major L., Waldhauser W.
BIOINSPIRED BIOMIMETIC AND NANOBIMATERIALS, vol.3, no.3, pp.146-159, 2014 (SCI-Expanded)
- XXII. **A study of wear of high-chromium cast iron under dry friction**
ATAPEK Ş. H., POLAT Ş.
METAL SCIENCE AND HEAT TREATMENT, vol.55, no.3-4, pp.181-183, 2013 (SCI-Expanded)
- XXIII. **Effect of matrix toughness and grain morphology on fracture of steels**
ATAPEK Ş. H., GÜMÜŞ S., POLAT Ş.
METAL SCIENCE AND HEAT TREATMENT, vol.54, no.11-12, pp.648-653, 2013 (SCI-Expanded)
- XXIV. **Effect of tempering temperature and microstructure on the corrosion behavior of a tempered steel**
ATAPEK Ş. H., POLAT Ş., ZOR S.
PROTECTION OF METALS AND PHYSICAL CHEMISTRY OF SURFACES, vol.49, no.2, pp.240-246, 2013 (SCI-Expanded)
- XXV. **Wear Behaviour of Heat Treated Hot Work Tool Steels under Dry Sliding Conditions**
Polat S., ATAPEK Ş. H., TÜREDİ E., AKTAS G.
MATERIALS TESTING, vol.55, no.3, pp.163-167, 2013 (SCI-Expanded)
- XXVI. **Wear Behaviour of Heat Treated 100Cr6 Steels**
Polat S., TÜREDİ E., ATAPEK Ş. H., KOSEOGLU M.
MATERIALS TESTING, vol.55, no.4, pp.290-293, 2013 (SCI-Expanded)
- XXVII. **Microstructural characterization of carbides in a cast high-speed steel using different metallographic techniques Mikrostrukturelle charakterisierung von carbiden in einem schnellarbeitsstahlguss anhand verschiedener metallographischer verfahren**
Gümüş S., Atapek Ş. H., Polat Ş., Erişir E., Alkan A.
Praktische Metallographie/Practical Metallography, vol.49, no.12, pp.767-781, 2012 (SCI-Expanded)
- XXVIII. **Effect of zinc oxide type on ageing properties of Styrene Butadiene Rubber compounds**
Vatansever N., POLAT Ş.
MATERIALS & DESIGN, vol.31, no.3, pp.1533-1539, 2010 (SCI-Expanded)
- XXIX. **A SMALL-ANGLE NEUTRON-SCATTERING STUDY OF THE KINETICS OF PHASE-SEPARATION IN A SUPERSATURATED NI-12.5 AT-PCT SI ALLOY**
POLAT Ş., CHEN H., EPPERSON J.
METALLURGICAL TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, vol.20, no.4, pp.699-710,

- 1989 (SCI-Expanded)
- XXX. **A SMALL-ANGLE NEUTRON-SCATTERING STUDY OF DECOMPOSITION DYNAMICS IN NI87.5SI12.5**
POLAT Ş., CHEN H., EPPERSON J.
JOURNAL OF APPLIED CRYSTALLOGRAPHY, vol.21, pp.878-882, 1988 (SCI-Expanded)
- XXXI. **OBSERVATION OF DIFFUSE STREAKS IN AU-FE ALLOYS UTILIZING SYNCHROTRON RADIATION**
MARSH C., POLAT Ş., CHEN H.
SCRIPTA METALLURGICA, vol.21, no.5, pp.619-623, 1987 (SCI-Expanded)
- XXXII. **SPATIAL CORRELATION OF GAMMA-PRIME PRECIPITATES IN A NI-SI ALLOY**
POLAT Ş., MARSH C., LITTLE T., JU C., EPPERSON J., CHEN H.
SCRIPTA METALLURGICA, vol.20, no.12, pp.1739-1744, 1986 (SCI-Expanded)
- XXXIII. **AN INSITU X-RAY-DIFFRACTION STUDY OF PRECIPITATION FROM A SUPERSATURATED SOLID-SOLUTION - THE GAMMA'-PRECIPITATE IN A NI-12.5-PERCENT SI ALLOY**
POLAT Ş., DVORACK M., CHEN H.
ACTA METALLURGICA, vol.33, no.12, pp.2175-2183, 1985 (SCI-Expanded)
- XXXIV. **THE EARLY STAGE OF GAMMA-PRIME PRECIPITATION IN A NICKEL-SILICON ALLOY**
DVORACK M., POLAT Ş., CHEN H.
SCRIPTA METALLURGICA, vol.18, no.12, pp.1395-1399, 1984 (SCI-Expanded)
- XXXV. **DECOMPOSITION OF A BETA-1-PHASE CU-AL-NI ALLOY AT ELEVATED-TEMPERATURE**
DVORACK M., KUWANO N., POLAT Ş., CHEN H., WAYMAN C.
SCRIPTA METALLURGICA, vol.17, no.11, pp.1333-1336, 1983 (SCI-Expanded)

Articles Published in Other Journals

- I. **PRODUCTION OF TRANSLUCENT ALUMINA CERAMICS BY TAPE CASTING**
TABAK Y., POLAT Ş., Kılıç A., Kavaklı Vatansever B.
Journal of Naval Sciences and Engineering, vol.19, no.1, pp.3-17, 2023 (Peer-Reviewed Journal)
- II. **Fatigue behavior of precipitation strengthened Cu-Ni-Si alloy modified by Cr and Zr addition**
Atapek Ş. H., Pantelakis S., Polat Ş., Chamos A., Aktas Celik G.
International Journal of Structural Integrity, vol.11, no.6, pp.861-873, 2020 (Peer-Reviewed Journal)
- III. **MATRIX DESIGN OF A NOVEL DUCTILE CAST IRON MODIFIED BY W AND Al: A COMPARISON BETWEEN THERMODYNAMIC MODELING AND EXPERIMENTAL DATA**
AKTAŞ ÇELİK G., TZINI M. I. T., POLAT Ş., ATAPEK Ş. H., HAIDEMENOPOULOS G. N.
Metallurgical and Materials Engineering, vol.26, no.1, pp.15-29, 2020 (ESCI)
- IV. **Solid Particle Erosion Behavior of SiMo Ductile Cast Iron**
Aktaş Çelik G., Polat Ş., Atapek Ş. H., Fidan S.
Bayburt Üniversitesi Fen Bilimleri Dergisi, vol.1, pp.22-27, 2018 (Peer-Reviewed Journal)
- V. **Characterization of Ferritic Ductile Cast Irons Modified by W and Nb Additions**
Aktaş Çelik G., Polat Ş., Atapek Ş. H., Haidemenopoulos G. N.
Bayburt Üniversitesi Fen Bilimleri Dergisi, vol.1, no.1, pp.15-21, 2018 (Peer-Reviewed Journal)
- VI. **Microstructural and Tribological Characterization of Aluminium Bronzes with Additions of Si and Cr**
Pisarek B. P., KOWALSKI B., ATAPEK Ş. H., POLAT Ş., TÜFEKÇİ T.
ARCHIVES OF FOUNDRY ENGINEERING, vol.18, no.1, pp.93-98, 2018 (ESCI)
- VII. **Tribological Characterization of Al-bronzes Used as Mold Materials**
Atapek Ş. H., Celik G., Polat Ş., Pisarek B.
Archives of Foundry Engineering, vol.17, no.4, pp.7-12, 2017 (Peer-Reviewed Journal)
- VIII. **Microstructural and Mechanical Characterization of Solidified Austenitic Stainless Steels**
Celik G., Polat Ş., Atapek Ş. H., Haidemenopoulos G. N.
ARCHIVES OF FOUNDRY ENGINEERING, vol.17, no.3, pp.163-167, 2017 (ESCI)
- IX. **Metallographic Examinations on Quenched and Tempered Steels Subjected to Ballistic Impact**
Atapek Ş. H., Zeytin H., Polat Ş., Güven G.

Journal of Dynamic Behavior of Materials, vol.3, no.3, pp.426-435, 2017 (Scopus)

- X. **Antibakterielle und knochenwachstumsfördernde Beschichtungen für Bandscheibenimplantate**
Lackner J., Inal K., Gümüş S., Polat Ş., Waldhauser W.
Galvanotechnik, vol.108, pp.1872-1881, 2017 (Scopus)
- XI. **Su bazlı Si3N4 süspansiyonlarda dispersan miktarının optimizasyonu**
Ünsal H., Kılıç A., Polat Ş., Tabak Y., Kavaklı Vatansever B.
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.31, no.ÖS2, pp.27-32, 2016 (Peer-Reviewed Journal)
- XII. **Yüzey ve Yüzey Altı Mikroyapısı Üzerine Deformasyon, Isıl İşlem ve Bilyeli Dövme Etkisinin İncelenmesi**
Aktaş Çelik G., Polat Ş., Atapek Ş. H.
Metal İşleme, no.222, pp.46-52, 2016 (Non Peer-Reviewed Journal)
- XIII. **51CrV4 yay çeliğinin yüzey özelliklerinin incelenmesi**
Komec A., Dıkcı K., Atapek Ş. H., Polat Ş., Aktas G., Kurt Z., Çakır B.
Metal Dünyası, no.277, pp.93-97, 2016 (Non Peer-Reviewed Journal)
- XIV. **Yay çeliklerinde yüzey ve yüzey altı mikroyapısı üzerine deformasyon ısıl işlem ve bilyalı dövme etkisinin incelenmesi**
Komec A., Dıkcı K., Atapek Ş. H., Polat Ş., Aktas G., Kurt Z., Çakır B.
MakinaTek, no.222, pp.46-52, 2016 (Non Peer-Reviewed Journal)
- XV. **Characterization of the fracture behaviour of X42 microalloyed pipeline steel**
ÜNAL H. İ., ATAPEK Ş. H., Baran Gürkan B., POLAT Ş., ERİŞİR E.
INTERNATIONAL JOURNAL OF STRUCTURAL INTEGRITY, vol.6, no.5, pp.567-577, 2015 (ESCI)
- XVI. **Bir sıcak iş takım çeliğinde ısıl işlem uygulamaları ve mikroyapısal karakterizasyon**
Aktaş G., Atapek Ş. H., Türedi E., Polat Ş.
MakinaTek, no.182, pp.222-230, 2012 (Non Peer-Reviewed Journal)
- XVII. **Bir sıcak iş takım çeliğinde ısıl işlem uygulamaları ve Mikroyapısal Karakterizasyon**
Aktaş Çelik G., Polat Ş., Atapek Ş. H., Türedi E.
Makina İmalat, no.182, pp.222-230, 2012 (Non Peer-Reviewed Journal)
- XVIII. **Biyometalik malzemelerde mikroyapısal incelemeler**
Erişir E., Gümüş S., Atapek Ş. H., Polat Ş., Ünal H. İ.
MakinaTek, no.172, pp.388-392, 2012 (Non Peer-Reviewed Journal)
- XIX. **Balistik malzemelere bir alternatif sıvı zırh**
Atapek Ş. H., Polat Ş.
Military Science and Intelligence, no.78, pp.72-75, 2012 (Non Peer-Reviewed Journal)
- XX. **Seramik ve seramik matriksli kompozitlerin balistik özellikleri**
Atapek Ş. H., Polat Ş.
Military Science and Intelligence, no.75, pp.38-44, 2012 (Non Peer-Reviewed Journal)
- XXI. **42Cr5MoSiV sıcak iş takım çeliğinin mekanik özelliklerine ısıl işlem etkisi**
Aktaş Çelik G., Atapek Ş. H., Polat Ş.
MakinaTek, no.174, pp.294-302, 2012 (Non Peer-Reviewed Journal)
- XXII. **Balistik koruma amaçlı polimer esaslı malzemeler ve özellikleri**
Polat Ş., Atapek Ş. H.
Military Science and Intelligence, no.77, pp.50-57, 2012 (Non Peer-Reviewed Journal)
- XXIII. **Çökelti Sertleştirilmiş Bakır Alaşımları ve Mikroyapıları**
Polat Ş., Atapek Ş. H., Erişir E., Gümüş S., Altug G.
Makinatek, no.170, pp.218-227, 2011 (Non Peer-Reviewed Journal)
- XXIV. **Sıcak iş takım çelikleri: alaşımlama, ısıl işlem, mikroyapı, mekanik özellikler III**
Atapek Ş. H., Polat Ş., Erişir E.
Makinatek, no.165, pp.134-138, 2011 (Non Peer-Reviewed Journal)
- XXV. **Sıcak iş takım çelikleri alaşımlama ısıl işlem mikroyapı mekanik özellikler II**
Polat Ş., Erişir E., Atapek Ş. H.

- MakinaTek, no.164, pp.144-148, 2011 (Non Peer-Reviewed Journal)
- XXVI. **Sıcak iş takım çelikleri alaşımlama ısıtma işlem mikroyapı mekanik özellikler I**
Polat Ş., Erişir E., Atapek Ş. H.
MakinaTek, no.163, pp.116-120, 2011 (Non Peer-Reviewed Journal)
- XXVII. **Toz metalurjik bir çeliğin metalografisi ve ısıtma işlem etkisi II**
Polat Ş., Atapek Ş. H., Boysan O.
MakinaTek, no.162, pp.176-178, 2011 (Non Peer-Reviewed Journal)
- XXVIII. **Toz metalurjik bir çeliğin metalografisi ve ısıtma işlem etkisi I**
Polat Ş., Atapek Ş. H., Boysan O.
MakinaTek, no.161, pp.258-264, 2011 (Non Peer-Reviewed Journal)
- XXIX. **Lastik karışımlarında kullanılan çinko oksit miktarının azaltılması**
VATANSEVER N., POLAT Ş.
Kauçuk Dergisi, no.41, pp.16-19, 2011 (Non Peer-Reviewed Journal)
- XXX. **Demir dışı metallerin ve metal matriksli kompozitlerin koruyucu malzeme olarak kullanımı**
Atapek Ş. H., Polat Ş.
Military Science and Intelligence, no.74, pp.38-45, 2011 (Non Peer-Reviewed Journal)
- XXXI. **Isıtma işlem uygulanmış bir sac çeliğinin tuzlu su ortamında korozyon davranışı ve mikroyapısal incelemeler**
ATAPEK Ş. H., POLAT Ş.
Tersane, pp.36-39, 2010 (Non Peer-Reviewed Journal)
- XXXII. **Lastik karışımlarında yaşlanma etkilerinin incelenmesi**
VATANSEVER N., POLAT Ş., KODAL M.
Pagev Plastik Dergisi, no.106, pp.124-128, 2010 (Non Peer-Reviewed Journal)
- XXXIII. **Temperlenmiş beyritik bir çeliğin aşınma davranışı**
POLAT Ş., ATAPEK Ş. H., BIRBASAR O., AYDEMİR M. C.
Metal Makina Dergisi, pp.330-334, 2010 (Non Peer-Reviewed Journal)
- XXXIV. **Ferritik çeliklerde farklı kaynak uygulamaları ve mikroyapısal incelemeler**
POLAT Ş., ATAPEK Ş. H., BIRBASAR O., İZGİ S.
Metal Makina Dergisi, pp.279-283, 2010 (Non Peer-Reviewed Journal)
- XXXV. **SAE 8620 çeliğinde ısıtma işlemin mikroyapı ve sertlik üzerine etkisi**
POLAT Ş., ATAPEK Ş. H., BIRBASAR O., ÖLMEZ Y.
Metal Makina Dergisi, pp.214-217, 2009 (Non Peer-Reviewed Journal)
- XXXVI. **Yüksek krom katkılı dökme demirlerde mikroyapı karakterizasyonu mikroyapı aşınma ilişkisi**
KARAGOZ Ş., ATAPEK Ş. H., ADALI R., POLAT Ş.
Metal Dünyası, pp.100-104, 2008 (Non Peer-Reviewed Journal)
- XXXVII. **Karbon nanotüpler**
VATANSEVER N., POLAT Ş.
Pagev Plastik Dergisi, no.96, pp.122-128, 2008 (Non Peer-Reviewed Journal)
- XXXVIII. **Polimer kil nano kompozitleri**
POLAT Ş., VATANSEVER N.
Pagev Plastik Dergisi, no.83, pp.144-149, 2005 (Non Peer-Reviewed Journal)
- XXXIX. **Nano malzemelerin kullanım alanları ve geleceği**
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- V. **Egzoz Manifold Malzemesi Olarak Geliştirilmiş Yüksek Silisyumlu Sünek Dökme Demirlerin Oksidasyon Özelliklerinin İncelenmesi**
Aktaş Çelik G., Atapek Ş. H., Polat Ş.
X. International Automotive Technologies Congress, Bursa, Turkey, 6 - 07 September 2021, pp.1292-1297
- VI. **Oxidation behavior of 5Si1Nb and 5Si1Nb4Al cast alloys developed as candidate exhaust manifold materials**
Aktaş Çelik G., Polat Ş., Atapek Ş. H., Tzini M. T., Haidemenopoulos G. N.
V. International Iron & Steel Symposium, Karabük, Turkey, 1 - 03 April 2021, pp.66-69
- VII. **Development of 5Si1Nb and 5Si1Nb4Al cast alloys as candidate exhaust manifold materials**
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V. International Iron & Steel Symposium, Karabük, Turkey, 1 - 03 April 2021, pp.62-65
- VIII. **Production of Si3N4 ceramic tapes by tape casting method for artificial bone application**
TABAK Y., KILIÇ A., POLAT Ş., KAVAKLI VATANSEVER B., ÜNSAL H.
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- XI. **Domuzdamı Hellenistik ve Roma dönemi seramiklerinin mikroyapısal karakterizasyonu**
Aktaş Çelik G., Tülek F., Atapek Ş. H., Polat Ş.
18. Ulusal Kil Sempozyumu, Kocaeli, Turkey, 25 - 28 September 2019
- XII. **Microstructural and thermal characterization of 3.2C-5Si-1W novel ductile cast iron**
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Metallurgical and Materials Engineering Congress of South-East Europe, Belgrade, Serbia, 5 - 07 June 2019, pp.52
- XIII. **Thermodynamic modelling of 3C-6Si-1W-1Al ductile cast iron**
Aktaş Çelik G., Polat Ş., Atapek Ş. H., Tzini M. I., Haidemenopoulos G. N.
Metallurgical and Materials Engineering Congress of South-East Europe, Belgrade, Serbia, 5 - 07 June 2019, pp.28
- XIV. **3.2C-5Si-1W yeni nesil sünek dökme demirin mikroyapısal ve mekanik karakterizasyonu**
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- XV. **Development of a Novel Ductile Cast Iron for Elevated Temperatures by ThermoCalc Studies:Effect**

of Aluminum Content

Aktaş Çelik G., Tzini M. I. T., Polat Ş., Atapek Ş. H., Haidemenopoulos G. N.

19. International Metallurgy and Materials Congress, İstanbul, Turkey, 25 - 27 October 2018, pp.1083-1086

- XVI. **Computation of the Effect of Alloying Elements on the Physical Properties of SiMo Ductile Cast Iron**
Aktaş Çelik G., Tzini M. I. T., Atapek Ş. H., Polat Ş., Haidemenopoulos G. N.
19. International Metallurgy and Materials Congress, İstanbul, Turkey, 25 - 27 October 2018, pp.1091-1094
- XVII. **Ion plasma nitriding of ferritic steel AISI 430 F**
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- XVIII. **Characterization of medieval glazed ceramics of the East Plain Cilicia Survey**
TÜLEK F., AKTAŞ ÇELİK G., ATAPEK Ş. H., POLAT Ş.
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- XIX. **Characterization of the high temperature oxidation behavior of iron based alloys used as exhaust manifolds**
Çelik G., Kahrlman F., Atapek Ş. H., Polat Ş.
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- XX. **Failure behavior of PA12 based SLS lattice structure with macro-porosity**
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- XXI. **Tribological behavior of heat treated CuCrZr alloy**
Çelik G., ATAPEK Ş. H., POLAT Ş.
5th International Conference of Engineering Against Failure, ICEAF-V 2018, Chios, Greece, 20 - 22 June 2018, vol.188
- XXII. **Characterization of the high temperature oxidation behavior of iron based alloys used as exhaust manifolds**
AKTAŞ ÇELİK G., KAHRIMAN F., ATAPEK Ş. H., POLAT Ş.
5th International Conference of Engineering Against Failure (ICEAF-V 2018), Greece, 01 August 2018
- XXIII. **The effect of layer architecture on the tribological behaviour of coatings**
GÜMÜŞ S., POLAT Ş., Lackner J., Waldhauser W.
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- XXIV. **Characterization of fatigue failed aged Cu-Ni-Si alloys**
ATAPEK Ş. H., Pantelakis S. G., POLAT Ş., Chamos A. N., Çelik G.
5th International Conference of Engineering Against Failure, ICEAF-V 2018, Chios, Greece, 20 - 22 June 2018, vol.188
- XXV. **Tribological properties of copper-chromium-zirconium alloys**
Aktaş Çelik G., Polat Ş., Atapek Ş. H.
VIII. International Metallurgical Congress, Ohrid, Macedonia, 30 May - 03 June 2018, pp.1-5
- XXVI. **Tribological characterization of ion plasma nitrided stainless steels**
ATAPEK Ş. H., JASHARİ N., CVETKOVSKI S., POLAT Ş., AKTAŞ ÇELİK G.
VIII. International Metallurgical Congress, 30 May - 03 June 2018
- XXVII. **Adhesion and tribological performance of hard CAPVD coatings**
AKTAŞ ÇELİK G., FOUNTAS K., ATAPEK Ş. H., KAMOUTSI E., POLAT Ş., D ZERVAKI A.
EUROMAT, 17 - 22 September 2017
- XXVIII. **Characterization of the high temperature oxidation behavior of SiMo cast iron used as exhaust manifolds**
AKTAŞ ÇELİK G., ATAPEK Ş. H., POLAT Ş., HAIDEMENOPOULOS G. N.
EUROMAT, 17 - 22 September 2017

- XXIX. **In vitro an in vivo Biocorrosion Behaviour of Antimicrobial, Osteoconductive Ti-Mg-Ag (Pt) Gradient Layers for Spinal Disc Implants**
Lackner J., Waldhauser W., GÜMÜŞ S., POLAT Ş.
28th Annual Conference of the European Society for Biomaterials, Atina, Greece, 4 - 08 September 2017
- XXX. **Functionally graded porous Si3N4 ceramics produced by tape casting and sintered in nitrogen**
KILIÇ A., TABAK Y., KAVAKLI VATANSEVER B., ÜNSAL H., POLAT Ş.
15th Conference Exhibition of the European Ceramic Society, 9 - 13 July 2017, pp.553
- XXXI. **Functionally graded porous Si3N4 ceramics produced by tape casting and sintered in Air**
TABAK Y., KILIÇ A., POLAT Ş., ÜNSAL H., KAVAKLI VATANSEVER B.
15th Conference Exhibition of the European Ceramic Society, 9 - 13 July 2017, pp.566
- XXXII. **Farklı grafit katkılarının Si3N4 seramik şeritlerin mikroyapısı üzerine etkisi**
Kılıç A., Tabak Y., Ünsal H., Kavaklı Vatansever B., Polat Ş.
23. Elektron Mikroskop Kongresi, Antalya, Turkey, 19 - 21 May 2017, pp.85
- XXXIII. **Şerit döküm yöntemi ile üretilen solvent bazlı Si3N4 seramiklerin por miktarının mikroyapı üzerine etkisi**
Tabak Y., Kılıç A., Ünsal H., Polat Ş., Kavaklı Vatansever B., Bakan H. İ.
23. Elektron Mikroskopi Kongresi (EMK 2017), Antalya, Turkey, 19 - 21 May 2017, pp.79
- XXXIV. **Zırh çeliklerinde balistik darbe nedenli oluşan adyabatik kayma bantlarının incelenmesi**
Ünsal H., Atapek Ş. H., Polat Ş.
23. Elektron Öikroskopi Kongresi (EMK 2017), Antalya, Turkey, 19 - 21 May 2017, pp.82-83
- XXXV. **PEEK üzerine Çöktürülmüş Ti-Mg-Ag esaslı Fonksiyonel olarak Derecelendirilmiş Kaplamada Hücre-Malzeme Etkileşiminin SEM ile incelenmesi**
GÜMÜŞ S., POLAT Ş., Lackner J., Waldhauser W.
23. Ulusal Elektron Mikroskopi Kongresi, Antalya, Turkey, 19 - 21 May 2017
- XXXVI. **PEEK esaslı implant malzemelerin osteokondüktivitesinin çok katmanlı kaplamalarla geliştirilmesi**
Polat Ş., Gümüş S., Lackner J. M., Waldhauser W.
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- XXXVII. **Simulation and analysis of the solidification characteristics of a austenitic stainless steel**
Aktaş Çelik G., Tzini M. I., ATAPEK Ş. H., POLAT Ş., Haidemeneopoulos G. N.
III. International Iron and Steel Symposium, Karabük, Turkey, 3 - 05 April 2017, pp.445-448
- XXXVIII. **Tribological behavior of cast CF3 and CF3M austenitic stainless steels**
AKTAŞ G., POLAT Ş., ATAPEK Ş. H.
18. International Metallurgy and Materials Congress, 29 September - 01 October 2016
- XXXIX. **Microstructure and Properties of Age Hardenable Cu 2 55Ni 0 55Si Alloy**
ATAPEK Ş. H., AKTAŞ G., POLAT Ş., CHAMOS A. N., PANTELAKİS S. G.
18. International Metallurgy and Materials Congress, 29 September - 01 January 2016
- XL. **Solid particle erosion behavior of cast CuCrZr alloy**
AKTAŞ G., ATAPEK Ş. H., FİDAN S., POLAT Ş.
18. International Metallurgy and Materials Congress, 29 September - 01 October 2016
- XLI. **Fractography of aged Cu 2 55Ni 0 55Si 0 25Zr 0 25Cr alloy**
ATAPEK Ş. H., PANTELAKİS S. G., CHAMOS A. N., POLAT Ş., AKTAŞ G.
1. International Mediterranean Science and Engineering Congress, 26 - 28 October 2016
- XLII. **Simulation and analysis of the solidification characteristics of a Si Mo ductile iron**
AKTAŞ G., TZİNİ M. I. T., POLAT Ş., ARISTEIDAKIS J. S., ATAPEK Ş. H., SARAFIOGLOU P. I., HAIDEMENEPOULOS G. N.
1. International Mediterranean Science and Engineering Congress, 26 - 28 October 2016
- XLIII. **Su bazlı Si3N4 süspansiyonlarda dispersan miktarının optimizasyonu**
ÜNSAL H., KILIÇ A., POLAT Ş., TABAK Y., VATANSEVER B. K.
1st International Mediterranean Science and Engineering Congress, 26 - 28 October 2016, pp.4250
- XLIV. **Improving Osteoconductivity and Antibacterial Properties of PEEK by Coating with Layered Thin Films**
GÜMÜŞ S., POLAT Ş., Lackner J., Waldhauser W.

3rd International Conference on Bioinspired and Biobased Chemistry and Materials, 16 - 19 October 2016

- XLV. **The Effect of Doping Ag with Pt on the Antibacterial Activity of Biomimetic Functionally Graded Thin Films**

GÜMÜŞ S., POLAT Ş., Lackner J., Waldhauser W.

3rd International Conference on Bioinspired and Biobased Chemistry and Materials, 16 - 19 October 2016

- XLVI. **Nano wrinkling of diamond like carbon thin films on amorphous polycarbonate and semicrystalline polyethylene terephthalate**

Lackner J., GÜMÜŞ S., POLAT Ş., Waldhauser W.

4th International Congress in Advances in Applied Physics and Materials Science (APMAS 2014), Fethiye, Turkey, 24 - 26 April 2014

- XLVII. **The Effect of Platinum Doping on the Morphology of Coatings on PEEK**

GÜMÜŞ S., POLAT Ş., Lackner J., Waldhauser W.

22nd National (Electron) Microscopy Congress (EMK 2015), Turkey, 2 - 04 September 2015

- XLVIII. **TRIBOLOGICAL CHARACTERIZATION OF Cu Al X BRONZES UNDER DRY SLIDING CONDITIONS**

ATAPEK Ş. H., ATILLA A., YILMAZ M., POLAT Ş., EŞGİN H., AKTAŞ G.

12th Multinational Congress on Microscopy, 23 - 28 August 2015

- XLIX. **Influence of Doping of Metal Coatings on PEEK to Tribological Behaviour**

GÜMÜŞ S., POLAT Ş., Lackner J., Waldhauser W.

4th International Conference of Engineering Against Failure, 24 - 26 June 2015

- L. **Physical and Mechanical Properties of Rubber Compounds Reinforced by Carbon Fibers Sized with Different Emulsion Agents**

Atilla A., Zeren M., Polat Ş.

4th International Conference of Engineering Against Failure (ICEAF IV) 24-26 June 2015, Skiathos, Greece, Volos, Greece, 24 - 26 June 2015

- LI. **Wear behaviour of hard thin film coated DIN 1 2367 steels used as die materials**

AKTAŞ G., POLAT Ş., ATAPEK Ş. H.

IV. International Conference of Engineering Against Fracture, 24 - 26 June 2015

- LII. **An investigation on the fatigue behaviour of Cu 2 55Ni 0 55Si alloy**

ATAPEK Ş. H., SİROPOULOS P., POLAT Ş., APOSTOLOS C., AKTAŞ G.

IV. International Conference of Engineering Against Fracture, 24 - 26 June 2015

- LIIL. **Effect of heat nitriding process on tribological properties of surface engineered steel aluminum pairs**

AKTAŞ G., POLAT Ş., ATAPEK Ş. H.

European Conference on Heat Treatment, 20 - 22 May 2015

- LIV. **Multi surface treatments for enhancement of the tribological properties of hot work tool steels used in AA6080 extrusion**

Aktaş G., Polat Ş., Atapek Ş. H.

EUROPEAN CONFERENCE ON HEAT TREATMENT , Venice, Italy, 20 - 22 May 2015, pp.70

- LV. **Effects of heat treatment on microstructure and properties of a precipitation hardened CuCrZr alloy**

POLAT Ş., ALTUĞ G. S.

144th Annual Meeting & Exhibition, 15 - 19 March 2015

- LVI. **CrMoV çeliği ile A6080 alaşım çiftinin yüksek sıcaklık tribolojik karakteristikleri**

Aktaş Çelik G., Atapek Ş. H., Polat Ş.

IV. İleri Teknolojiler Çalıştayı, İstanbul, Turkey, 14 - 16 October 2014, vol.1, pp.206-217

- LVII. **Deprem mühendisliğinde kullanılan şekil hafızalı alaşımlar için fiziksel metalurjik yaklaşımlar**

Aktaş Çelik G., Atapek Ş. H., Polat Ş.

IV. İleri Teknolojiler Çalıştayı, İstanbul, Turkey, 14 - 16 October 2014, vol.1, pp.182-191

- LVIII. **AlTiN kaplanmış DIN 1.2999 çeliğinin tribolojisi üzerine kaplama öncesi nitrasyon işleminin etkisi**

Aktaş Çelik G., Atapek Ş. H., Polat Ş.

IV. İleri Teknolojiler Çalıştayı, İstanbul, Turkey, 14 - 16 October 2014, vol.1, pp.167-181

- LIX. **Effect of Elastic Modulus of Nanolayers on Surface Morphology for Vacuum Coated Polymeric**

Biomaterials

GÜMÜŞ S., POLAT Ş., Lackner J., Waldhauser W.

VI. International Congress of Metallurgists of Macedonia, 29 May - 01 June 2014

- LX. **Mechanical and microstructural characterization of a precipitation hardened CuCrZr alloy**
POLAT Ş., ALTUĞ G. S.
VI. International Congress of Metallurgists of Macedonia, 29 May - 01 June 2014, pp.54
- LXI. **Evaluation of the physical and mechanical properties of rubber compounds reinforced with aramid based materials**
ALKAN A., ZEREN M., POLAT Ş.
VI. International Congress of Metallurgists of Macedonia, 29 May - 01 June 2014, pp.109
- LXII. **The characterization of electric arc furnace slag for recycling purposes**
Polat Ş., Kahrman F.
VI.th International Metallurgical Congress, Metallurgy, Materials, Enviromental (MME), Ohrid, Macedonia, 29 May - 01 June 2014, pp.134
- LXIII. **Evaluation of physical and microstructural properties of a precipitation hardened CuCoNiBe Alloy**
ALTUĞ G. S., POLAT Ş.
VI. International Congress of Metallurgists of Macedonia, 29 May - 01 June 2014, pp.53
- LXIV. **Effect of sintering temperature on alumina ceramics produced by tape casting**
TABAK Y., POLAT Ş., KILIÇ A., VATANSEVER B., BAKAN H.
VI. International Congress of Metallurgists of Macedonia, 25 August 2013 - 01 June 2014, pp.148
- LXV. **High temperature wear characteristics of surface treated AISI H11 tool steel**
Aktaş Çelik G., Polat Ş., Atapek Ş. H.
6. International Congress of Metallurgist of Macedonia, Ohrid, Macedonia, 30 May - 03 June 2014, vol.1, pp.43
- LXVI. **Comparison of the structures properties and wear characteristics of heat treated hot work tool steels used as die materials**
Aktaş Çelik G., Polat Ş., Atapek Ş. H.
VI. International Congress of Metallurgist of Macedonia, Ohrid, Macedonia, 30 May - 03 June 2014, vol.1, pp.52
- LXVII. **Investigation of the wear performance of nitrided CrN coated DIN 1.2343 hot work tool steels**
Aktaş Çelik G., Polat Ş., Atapek Ş. H.
3rd European Symposium on Friction, Wear and Wear Protection, Karlsruhe, Germany, 6 - 08 May 2014
- LXVIII. **Improvement of the wear resistance of DIN 1.2367 hot work tool steel by single and duplex PVD coating**
Aktaş Çelik G., Polat Ş., Atapek Ş. H.
3rd European Symposium on Friction, Karlsruhe, Germany, 6 - 08 May 2014, vol.1, pp.1
- LXIX. **The Correlation between Elastic Properties and AFM Images of Nanocoatings on Polymers**
GÜMÜŞ S., POLAT Ş., Lackner J., Waldhauser W.
4th International Advances in Applied Physics and Materials Science Congress & Exhibition, 24 - 27 April 2014
- LXX. **Wear behavior of surface treated X45MoCrV5-3-1 tool steel at room and elevated temperatures**
Aktaş Çelik G., Polat Ş., Atapek Ş. H.
IV. International Advances in Applied Physics and Materials Science Congress and Exhibition, Muğla, Turkey, 24 - 27 April 2014
- LXXI. **Investigation of Heat Treatment Effect on the Wear Resistance of AISI H11 Hot Work Tool Steels**
AKTAŞ G., ATAPEK Ş. H., POLAT Ş., TÜREDİ E.
7th International Advanced Technologies Symposium (IATS'13), İstanbul, Turkey, 30 October - 01 November 2013, pp.368-373
- LXXII. **Evaluation of the surface properties of biomaterials coated with nanolayers**
GÜMÜŞ S., POLAT Ş., LACKNER J., WALDHAUSER W.
Advanced Materials World Congress, 16 - 19 September 2013, pp.25-26
- LXXIII. **Evaluation of the physical and mechanical properties of rubber compounds reinforced with carbon fiber**
ALKAN A., ZEREN M., POLAT Ş.

Advanced Materials World Congress, 16 - 19 September 2013, pp.63

LXXIV. Evaluation of nanocoated polymeric biomaterials in term of surface properties

GÜMÜŞ S., POLAT Ş., LACKNER J., WALDHAUSER W.

Microscopy Conference, 25 - 30 August 2013, pp.523-524

LXXV. Stress corrosion cracking in AA5083 mold material used for curing rubber compounds

Alkan A., Gümüş S., Atapek Ş. H., Polat Ş.

Microscopy Conference , Regensburg, Germany, 25 - 30 August 2013, pp.686

LXXVI. Wear behavior of new generation powder metallurgical cold work tool steels

POLAT Ş., ATAPEK Ş. H., TÜREDİ E., GÜMÜŞ S., Yaman M.

Microscopy Congress (MC2013), Regensburg, Germany, 25 - 30 August 2013, pp.684-685

LXXVII. A metallographic study on quenched and tempered steels perforated by ballistic impact

ATAPEK Ş. H., KAZDAL ZEYTİN H., POLAT Ş., GÜVEN G.

3rd International Conference of Engineering Against Fracture, 26 - 28 June 2013, pp.98-107

LXXVIII. A failure analysis of AA5083 mold material used for curing rubber compounds

Alkan A., Gümüş S., Atapek Ş. H., Polat Ş.

3rd International Conference of Engineering Against Fracture (ICEAF III), Patra, Greece, 26 - 28 June 2013, pp.143-150

LXXIX. Characterization of Tensile Fracture of a Ferritic Pearlitic Dual Phase Steel Processed in Different Conditions

POLAT Ş., ATAPEK Ş. H., GÜMÜŞ S., TÜREDİ E., Özer G.

3rd International Conference of Engineering Against Failure (ICEAF III), Kos (İstanköy), Greece, 26 - 28 June 2013, pp.415-420

LXXX. Investigation of Dry Sliding Wear Mechanism of GG20 and GG25 Cast Iron Materials Used For Valves

POLAT Ş., ATAPEK Ş. H., TÜREDİ E., TAŞLIÇUKUR ÖZTÜRK Z., Altuğ G. S.

3rd International Conference of Engineering Against Failure (ICEAF III), Kos (İstanköy), Greece, 26 - 28 June 2013, pp.407-413

LXXXI. A Study on the Wear Behavior of CuSn10 Cast Bronze Materials Produced by Different Casting Techniques

POLAT Ş., ATAPEK Ş. H., TÜREDİ E., TAŞLIÇUKUR ÖZTÜRK Z., Altuğ G. S.

3rd International Conference of Engineering Against Failure (ICEAF III), Kos (İstanköy), Greece, 26 - 28 June 2013, pp.108-115

LXXXII. THE EFFECT OF HEAT TREATMENTS ON THE WEAR BEHAVIOR OF AISI H11 HOT WORK TOOL STEEL

Aktaş Çelik G., Türedi E., Atapek Ş. H., Polat Ş.

3. INTERNATIONAL CONFERENCE OF ENGINEERING AGAINST FRACTURE, PROCEEDINGS, Kastoria, Greece, 26 - 28 June 2013, vol.1, pp.117-125

LXXXIII. Nano kaplanmış polimer malzemelerin yüzey özelliklerinin atomik kuvvet mikroskobu ile değerlendirilmesi

GÜMÜŞ S., POLAT Ş., LACKNER J., WALDHAUSER W.

21. Ulusal Elektron Mikroskopi Kongresi, Turkey, 28 - 31 May 2013, pp.11

LXXXIV. Farklı ısıtma işlem uygulamaları sonrası AISI H11 sıcak iş takım çeliğinin kuru sürtünme aşınma davranışının incelenmesi

AKTAŞ G., POLAT Ş., ATAPEK Ş. H., TÜREDİ E.

21. Ulusal Elektron Mikroskopi Kongresi, Turkey, 28 - 31 May 2013, pp.6

LXXXV. Su verilmiş ve temperlenmiş çeliklerde balistik darbe sonrası mikroyapı incelemeleri

ATAPEK Ş. H., KAZDAL ZEYTİN H., POLAT Ş., GÜVEN G.

XXI. Ulusal Elektron Mikroskopi Kongresi, Mersin, Turkey, 28 - 31 May 2013, pp.207

LXXXVI. AA5083 kalıp malzemesinde gerilmeli korozyon çatlaması nedeni hasar oluşumu üzerine bir çalışma

ALKAN A., GÜMÜŞ S., ATAPEK Ş. H., POLAT Ş.

XXI. Ulusal Elektron Mikroskopi Kongresi, Mersin, Turkey, 28 - 31 May 2013, pp.201

LXXXVII. Çökelti sertleştirilmiş Cu Cr Zr alaşımının mikroyapısal karakterizasyonu

POLAT Ş., ALTUĞ G. S., ALKAN A.

21. Ulusal Elektron Mikroskopi Kongresi, Turkey, 28 - 31 May 2013, pp.2
- LXXXVIII. **Farklı ısıtma koşullarında çöktürme sertleştirilmiş Cu 2 Be alaşımının mikroyapısal karakterizasyonu**
ALTUĞ G. S., POLAT Ş., ALKAN A.
21. Ulusal Elektron Mikroskopi Kongresi, Turkey, 28 - 31 May 2013, pp.4
- LXXXIX. **AISI H11 sıcak iş takım çeliğinin aşınma davranışı üzerine ısıtma işlemi ve mikroyapı etkisi**
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TUBITAK Project, 1509 - TÜBİTAK International Industry R&D Projects Support Program, KORD ENDÜSTRİYEL İP VE İPLİK SANAYİ VE TİCARET A.Ş., Turkey, October 2019

ARCHIVES OF FOUNDRY ENGINEERING, Journal Indexed in ESCI, May 2019

JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, May 2019

INTERNATIONAL JOURNAL OF STRUCTURAL INTEGRITY, Journal Indexed in ESCI, January 2019

MECHANICS OF ADVANCED MATERIALS AND STRUCTURES, Journal Indexed in SCI-E, January 2019

TUBITAK Project, 2244 - Industrial Phd. Program Project, Bursa Uludağ University, Turkey, November 2018

TUBITAK Project, 2244 - Industrial Phd. Program Project, Koc University, Turkey, November 2018

TUBITAK Project, 2244 - Industrial Phd. Program Project, Sabanci University, Turkey, November 2018

TUBITAK Project, 2244 - Industrial Phd. Program Project, Sabanci University, Turkey, November 2018

MATERIALS AND DESIGN, Journal Indexed in SCI-E, October 2018

Kocaeli Journal of Science and Engineering, National Scientific Refreed Journal, May 2018

ARCHIVES OF FOUNDRY ENGINEERING, Journal Indexed in ESCI, May 2018

SÜLEYMAN DEMİREL ÜNİVERSİTESİ FEN EDEBİYAT FAKÜLTESİ FEN DERGİSİ = SÜLEYMAN DEMİREL UNIVERSITY

FACULTY OF ARTS AND SCIENCE JOURNAL OF SCIENCE, National Scientific Refreed Journal, September 2017

ARCHIVES OF FOUNDRY ENGINEERING, Journal Indexed in ESCI, May 2017

TUBITAK Project, 1501 - Industry R & D Projects Support Program, MİR ARAŞTIRMA VE GELİŞTİRME A.Ş., Turkey, April 2017

TUBITAK Project, 1501 - Industry R & D Projects Support Program, B-PLAS BURSA PLASTİK METAL İNŞAAT ENERJİ MADENCİLİK JEOTERMAL TURİZM SİVİL HAVACILIK VE TARIM SAN.VE TİC. A.Ş., Turkey, April 2017

TUBITAK Project, 1501 - Industry R & D Projects Support Program, S.K.T. YEDEK PARÇA VE MAKİNA SAN. VE TİC. A.Ş., Turkey, April 2017

TUBITAK Project, 1505 - University-Industry Cooperation Support Program, TÜBİTAK MAM - KİMYA ENSTİTÜSÜ, Turkey, June 2016

MATERIALS AND DESIGN, Journal Indexed in SCI-E, March 2016

INTERNATIONAL JOURNAL OF STRUCTURAL INTEGRITY, Journal Indexed in ESCI, November 2015

TUBITAK Project, 1501 - Industry R & D Projects Support Program, B-PLAS BURSA PLASTİK METAL İNŞAAT ENERJİ MADENCİLİK JEOTERMAL TURİZM VE TARIM SAN.VE TİC. A.Ş., Turkey, August 2015

MATERIALS AND DESIGN, Journal Indexed in SCI-E, April 2015

HIGH TEMPERATURE MATERIALS AND PROCESSES, Journal Indexed in ESCI, March 2015

HIGH TEMPERATURE MATERIALS AND PROCESSES, Journal Indexed in ESCI, August 2014

MATERIALS AND DESIGN, Journal Indexed in SCI-E, January 2014

MATERIALS AND DESIGN, Journal Indexed in SCI-E, April 2013

MATERIALS AND DESIGN, Journal Indexed in SCI-E, June 2011

MATERIALS AND DESIGN, Journal Indexed in SCI-E, February 2010

MATERIALS AND DESIGN, Journal Indexed in SCI-E, October 2009

TUBITAK Project, 1501 - Industry R & D Projects Support Program, ASSAN HANİL OTOMOTİV SANAYİ VE TİCARET A.Ş. , Turkey, September 2006

Scientific Consultations

Schneider Electric Türkiye, Scientific Consultancy, Kocaeli University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, Turkey, 2019 - 2020

Mobility Activity

Erasmus Programme, Lecturing, University of Thessaly , Greece, 2022 - 2022

Erasmus Programme, Lecturing, University of Thessaly , Greece, 2022 - 2022

Erasmus Programme, Lecturing, Lodz Üniversitesi, Poland, 2019 - 2019

Erasmus Programme, Lecturing, Skopje Kiril i Metodi Üniversitesi, Macedonia, 2019 - 2019

Erasmus Programme, Lecturing, University of Thessaly , Greece, 2018 - 2018

Erasmus Programme, Lecturing, University of Thessaly , Greece, 2016 - 2016

Erasmus Programme, Lecturing, University of Patras, Greece, 2015 - 2015

Metrics

Publication: 243

Citation (WoS): 167

Citation (Scopus): 218

H-Index (WoS): 7

H-Index (Scopus): 8

Congress and Symposium Activities

VIII. Polimer Bilim ve Teknoloji Kongresi, Working Group, Malatya, Turkey, 2022

Tire Technology Expo 2022, Working Group, Hannover, Germany, 2022

1st International Conference on Applied Engineering and Natural Sciences (ICAENS 2021), Attendee, Konya, Turkey, 2021

10th International Automotive Technologies Congress (OTEKON 2020), Attendee, Bursa, Turkey, 2021

25th International Iron & Steel Symposium (UDCS '21), Attendee, Karabük, Turkey, 2021

Additive Manufacturing Conference (AMC TURKEY), Working Group, İstanbul, Turkey, 2019

13th Conference for Young Scientists in Ceramics (CYSC-2019), Working Group, Novi-Sad, Serbia, 2019

18. Ulusal Kil Sempozyumu, Attendee, Kocaeli, Turkey, 2019

Metallurgical & Materials Engineering Congress of South-East Europe (MME SEE 2019), Attendee, Belgrade, Serbia, 2019

Uluslararası Marmara Fen ve Sosyal Bilimler Kongresi (IMASCON Bahar 2019), Working Group, Kocaeli, Turkey, 2019

19th International Metallurgy and Materials Congress (IMMC 2018), Attendee, İstanbul, Turkey, 2018

International Scientific Conference Machines Technologies Materials (MTM 2018), Working Group, Varna, Bulgaria, 2018

24th Annual Meeting of the European Association of Archaeologists (EAA 2018), Working Group, Barcelona, Spain, 2018

5th International Conference of Engineering Against Failure (ICEAF-V 2018), Attendee, Patras, Greece, 2018

VIII. International Metallurgical Congress (CMUM 2018), Invited Speaker, Ohrid, Macedonia, 2018

European Congress and Exhibition on Advanced Materials and Processes (EUROMAT 2017), Working Group, Thessaloniki, Greece, 2017

28th European Conference on Biomaterials (ESB 2017), Working Group, Athens, Greece, 2017

15th Conference & Exhibition of the European Ceramic Society (ECerS2017), Working Group, Budapest, Hungary, 2017

23. Elektron Mikroskopi Kongresi (EMK 2017), Attendee, Antalya, Turkey, 2017

3rd Iron and Steel Symposium (UDCS'17), Attendee, Karabük, Turkey, 2017

1st International Mediterranean Science and Engineering Congress (IMSEC 2016), Attendee, Adana, Turkey, 2016

3rd International Conference on Bioinspired and Biobased Chemistry & Materials, Attendee, Nice, France, 2016

18th International Metallurgy & Materials Congress (IMMC 2016), Attendee, İstanbul, Turkey, 2016

22. Elektron Mikroskopi Kongresi (EMK 2015), Working Group, İstanbul, Turkey, 2015

12th Multinational Congress on Microscopy, Attendee, Eger, Hungary, 2015

4th International Conference of Engineering Against Failure (ICEAF IV), Attendee, Patras, Greece, 2015

European Conference on Heat Treatment, Working Group, Venice, Italy, 2015

TMS2015, 144th Annual Meeting & Exhibition, Working Group, Florida, United States Of America, 2015

IV. İleri Teknolojiler Çalıştayı (İTÇ 2014), Attendee, İstanbul, Turkey, 2014

VI. International Congress of Metallurgists of Macedonia, Attendee, Ohrid, Macedonia, 2014

3rd European Symposium on Friction, Wear and Wear Protection, Working Group, Karlsruhe, Germany, 2014

IV. International Advances in Applied Physics & Materials Science Congress & Exhibition (APMAS 2014), Attendee, Muğla, Turkey, 2014

7th International Advanced Technologies Symposium (IATS'13), Attendee, İstanbul, Turkey, 2013

Advanced Materials World Congress (AMWC 2013), Attendee, İzmir, Turkey, 2013

Microscopy Conference (MC 2013), Attendee, Regensburg, Germany, 2013

3rd International Conference of Engineering Against Fracture (ICEAF III), Attendee, Patras, Greece, 2013

21. Ulusal Elektron Mikroskopi Kongresi, Attendee, Mersin, Turkey, 2013

III. İleri Teknolojiler Çalıştayı (İTÇ 2012), Attendee, İstanbul, Turkey, 2012

IV. Ulusal Polimer Bilim ve Teknoloji Kongresi, Attendee, Çanakkale, Turkey, 2012

21st International Conference on Metallurgy and Materials (METAL 2012), Attendee, Brno, Czech Republic, 2012

International Iron & Steel Symposium (IISS 2012), Attendee, Karabük, Turkey, 2012

II. İleri Teknolojiler Çalıştayı (İTÇ 2011), Attendee, İstanbul, Turkey, 2011

20. Ulusal Elektron Mikroskopi Kongresi, Attendee, Antalya, Turkey, 2011

9th International Fracture Conference, Attendee, İstanbul, Turkey, 2011

6th International Powder Metallurgy Conference, Attendee, Ankara, Turkey, 2011

17th International Symposium on Boron, Borides and Related Materials, Working Group, İstanbul, Turkey, 2011

2nd International Conference of Engineering Against Fracture (ICEAF II), Attendee, Patras, Greece, 2011

6th International Advanced Technologies Symposium (IATS'11), Attendee, Elazığ, Turkey, 2011
V. Demir-Çelik Kongresi, Attendee, Karabük, Turkey, 2011
5th International Conference on Advances in Mechanical Engineering and Mechanics (ICAMEM2010), Attendee, Tunis, Tunisia, 2010
15th International Metallurgy & Materials Congress (IMMC 2010), Attendee, İstanbul, Turkey, 2010
XII. International Corrosion Symposium (KORSEM'10), Attendee, Eskişehir, Turkey, 2010
3.Ulusal Polimer Bilim ve Teknoloji Kongresi ve Sergisi, Attendee, Kocaeli, Turkey, 2010
İleri Teknolojiler Çalıştay ve Sergisi (İTÇ 2010), Attendee, Kocaeli, Turkey, 2010
3. Isıl İşlem Sempozyumu, Attendee, İstanbul, Turkey, 2009
International Conference on Nanomaterials and Nanosystems (NanoMats2009), Attendee, İstanbul, Turkey, 2009
19. Ulusal Elektron Mikroskopi Kongresi, Attendee, Trabzon, Turkey, 2009
2. Yapay Organlar ve Destek Sistemleri Kongresi (TUYOD 2009), Attendee, Antalya, Turkey, 2009
4th Nanoscience and Nanotechnology Conference (NANO-TR4), Attendee, İstanbul, Turkey, 2008
13th International Conference on Applied Mechanics and Mechanical Engineering (AMME-13), Attendee, Cairo, Egypt, 2008
3.Savunma Teknolojileri Kongresi (SAVTEK 2006), Attendee, Ankara, Turkey, 2006
4. Uluslararası Toz Metalurjisi Konferansı, Attendee, Sakarya, Turkey, 2005
International Symposium on Dynamics of Ordering Processes in Condensed Matter, Working Group, Kyoto, Japan, 1987
International Conference on Phase Transformations, Working Group, Cambridge, England, 1987
115th TMS Annual Meeting 1986, Working Group, Louisiana, United States Of America, 1986
TMS-AIME Fall Meeting 1985, Attendee, Toronto, Canada, 1985
American Crystallographic Association: Annual Meeting, Attendee, California, United States Of America, 1985
TMS-AIME Fall Meeting 1984, Attendee, Michigan, United States Of America, 1984

Invited Talks

Tribological properties of copper-chromium-zirconium alloys, Conference, Macedonian Union of Metallurgists, Macedonia, May 2018

Scholarships

Tübitak NATO scholarship for graduate education abroad, TUBITAK, 1979 - 1982
Tübitak scholarship for undergraduate education, TUBITAK, 1973 - 1978

Awards

Polat Ş., Gümüş S., Publication Encouragement Award, Ulakbim - Tübitak, November 2017
Polat Ş., Kahrıman F., Publication Encouragement Award, Ulakbim - Tübitak, April 2015
Polat Ş., Atapek Ş. H., Publication Encouragement Award, Ulakbim - Tübitak, August 2014
Polat Ş., Certificate of Outstanding Contribution in Reviewing, Elsevier (Editors Of Materials & Design), January 2014
Polat Ş., Atapek Ş. H., Publication Encouragement Award, Ulakbim - Tübitak, September 2013
Polat Ş., Altuğ G. S., Best Poster Award in Materials Sciene (2nd place) - 21st National Microscopy Congress, Türk Elektron Mikroskopi Derneği, May 2013
Polat Ş., Vatansever N., Publication Encouragement Award, Ulakbim - Tübitak, March 2010
Polat Ş., BRİSA Kalite Ödülü (Üretime Destek Kategorisinde), Brisa A.Ş., October 1996

Non Academic Experience

