

Assoc. Prof. ŞEYDA POLAT

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: F-8317-2018

Yoksis Researcher ID: 153171

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 artifical 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., Evaluation of the mechanical and electrical properties of precipitation hardened copper alloys, Postgraduate, G.SULTAN(Student), 2014
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., 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., Fiber reinforced polymer matrix composites for ballistic applications, Postgraduate, Ö.MEMİŞ(Student), 2009
Polat Ş., Production and evaluation of ballistic performance of ceramic reinforced polymer matrix composites, Postgraduate, İ.ÖZLEM(Student), 2009
Polat Ş., Characterization of electrical arc furnace slag to be used as grit material, Postgraduate, F.GÜNDÖĞAN(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., Kamoutsi 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., Kahriman 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., Kahriman 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**
CELIK 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**
KOMEK A., DIKCI K., ATAPEK Ş. H., POLAT Ş., CELIK 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 S., Pantelakis S. G., POLAT S., 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 S., 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 S., 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 S., Kahnman F.
Materialpruefung/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 S., 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 S. H., POLAT S.
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 S., Major L., Waldhauser W.
BIOINSPIRED BIOMIMETIC AND NANOBiomATERIALS, vol.3, no.3, pp.146-159, 2014 (SCI-Expanded)
- XXII. **A study of wear of high-chromium cast iron under dry friction**
ATAPEK S. H., POLAT S.
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 S. H., GÜMÜŞ S., POLAT S.
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 S. H., POLAT S., 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 S. 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 S. 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 carbi-den in einem schnellarbeitsstahlguss anhand verschiedener metallographischer verfahren**
Gümüş S., Atapek S. H., Polat S., 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 S.
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 S., 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 S., 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 S., 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 S., 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 S., 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 S., 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 S., 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 S., 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 S. H., Pantelakis S., Polat S., 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 AI: A COMPARISON BETWEEN THERMODYNAMIC MODELING AND EXPERIMENTAL DATA**
AKTAŞ ÇELİK G., TZINI M. I. T., POLAT S., ATAPEK S. 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 S., Atapek S. 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 S., Atapek S. 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 S. H., POLAT S., 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 S. H., Celik G., Polat S., 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 S., Atapek S. 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 S. H., Zeytin H., Polat S., Güven G.

- Journal of Dynamic Behavior of Materials, vol.3, no.3, pp.426-435, 2017 (Scopus)
- X. **Antibakterielle und knochenwachstumfördernde 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., Dıkçı 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 isıl işlem ve bilyalı dövme etkisinin incelenmesi**
Komec A., Dıkçı 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 isıl 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 isıl 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 isıl 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, isıl 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 isıl 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 ıslı 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 ıslı 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 ıslı işlem etkisi I**
Polat Ş., Atapek Ş. H., Boysan O.
MakinaTek, no.161, pp.258-264, 2011 (Non Peer-Reviewed Journal)
- XXIX. Lastik karışıntılarında 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. ıslı işlem uygulanmış bir sac çeliğinin tuzlu su ortamında korozyon davranışları ve mikroyapısal incelemeler**
ATAPEK Ş. H., POLAT Ş.
Tersane, pp.36-39, 2010 (Non Peer-Reviewed Journal)
- XXXII. Lastik karışıntılarında yaşlanma etkilerinin incelenmesi**
VATANSEVER N., POLAT Ş., KODAL M.
Pagev Plastik Dergisi, no.106, pp.124-128, 2010 (Non Peer-Reviewed Journal)
- XXXIII. Temperlenmiş beynitik bir çeliğin aşınma davranışları**
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 ıslı 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 kataklı 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**
VATANSEVER N., POLAT Ş.
Pagev Plastik Dergisi, no.79, pp.92-96, 2005 (Non Peer-Reviewed Journal)

Books & Book Chapters

- I. **Antibakterielle und knochenwachstumsfördernde Beschichtungen für Bandscheibenimplantate**
Lackner J. M., İnal K., Gümüş S., Polat Ş., Waldhauser W.
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MECHANICS OF ADVANCED MATERIALS AND STRUCTURES, Journal Indexed in SCI-E, January 2019

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

TUBITAK Project, 2244 - Industrial Phd. Program Project, Bursa Uludağ 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 DEMIREL ÜNİVERSİTESİ FEN EDEBİYAT FAKÜLTESİ FEN DERGİSİ = SÜLEYMAN DEMIREL 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, Skopye 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: 242

Citation (WoS): 183

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 (İTC 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 (İTC 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 (İTC 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.Uluslararası Polimer Bilim ve Teknoloji Kongresi ve Sergisi, Attendee, Kocaeli, Turkey, 2010
İleri Teknolojiler Çalıştayı ve Sergisi (İTC 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 Mikroskopı 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., Kahriman 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 Mikroskopı 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

