

## Prof. CEMİL HAKAN GÜR

### Personal Information

Office Phone: [+90 312 210 5916](tel:+903122105916)

Fax Phone: [+90 312 210 2518](tel:+903122102518)

Email: [chgur@metu.edu.tr](mailto:chgur@metu.edu.tr)

Web: <https://www.mete.metu.edu.tr>

Address: ODTÜ Metalurji ve Malzeme Müh. Bl. Üniversiteler Mah. 06800 Çankaya, Ankara

### International Researcher IDs

ScholarID: Z1KS9kcAAAAJ

ORCID: 0000-0002-4884-9818

Publons / Web Of Science ResearcherID: P-7839-2015

ScopusID: 35567617800

Yoksis Researcher ID: 13512

### Education Information

Doctorate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Metalurji, Turkey 1989 - 1995

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Metalurji, Turkey 1986 - 1989

Undergraduate, Middle East Technical University, Faculty of Engineering, Metalurji, Turkey 1981 - 1986

### Foreign Languages

German, B1 Intermediate

English, B2 Upper Intermediate

### Dissertations

Doctorate, Finite element modelling and measurement of stress evolution in quenching processes, Middle East Technical University, Graduate School of Natural and Applied Sciences, Metalurji Mühendisliği (Dr), 1995

Postgraduate, Finite element simulation of rigid-plastic deformation on micro-computers, Middle East Technical University, Graduate School of Natural and Applied Sciences, Metalurji Ve Malzeme Mühendisliği (YI) (Tezli), 1989

### Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Testing and Control of Materials, Mechanical Properties, Nondestructive Testing, Thermal Treatment, Material Characterization, Mechanical Metallurgy, Metallic Materials, Engineering and Technology

### Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 2008 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 2002 - 2008

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1997 - 2002

Expert, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1996 - 1997

Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1988 - 1996

## Academic and Administrative Experience

Director of the Center, Middle East Technical University, Presidency Office, Welding Technology and Non-Destructive Testing Research and Application Center, 2007 - 2024

Head of Department, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 2012 - 2022

## Courses

Mechanical Behavior of Materials, Undergraduate, 2020 - 2021

Non-Destructive Evaluation of Materials, Undergraduate, 2019 - 2020

## Advising Theses

Batgün C., Gür C. H., INVESTIGATING THE CREEP RUPTURE BEHAVIOR OF P91 STEEL BY EMPIRICAL APPROACHES: IN AS-MANUFACTURED CONDITION AND AFTER SHIELDED METAL ARC WELDING, Doctorate, M.JUNAID(Student), 2023

Gür C. H., DESIGNING THE MICROSTRUCTURE OF ADDITIVELY MANUFACTURED IN718 COMPONENTS BY OPTIMIZING THE PROCESS AND HEAT TREATMENT PARAMETERS TO IMPROVE MECHANICAL PROPERTIES, Doctorate, T.KALELİ(Student), 2023

Gür C. H., Nondestructive evaluation of the effects of carburizing process parameters on microstructure and residual stress state of sae 9310 steel via magnetic barkhausen noise method, Postgraduate, Z.YILDIRIM(Student), 2022

Gür C. H., Investigating effects of heat treatment processes on microstructural and mechanical properties of additively manufactured 18ni300 maraging steel, Postgraduate, İ.Aydın(Student), 2020

Gür C. H., Yurtışık K., Effects of heat input and thermal cycles to the fracture toughness of api 5L grade X70m steel welded by gas metal arc welding, Postgraduate, E.EROL(Student), 2019

GÜR C. H., YURTIŞIK K., Microstructure control of AISI 4135 for optimization of fatigue and fracture performance, Postgraduate, B.ÖZCAN(Student), 2018

GÜR C. H., Investigating the fracture behaviour of X70M linepipe steel girth weldments via single edge notched tension and bend tests, Postgraduate, U.TOSUN(Student), 2018

GÜR C. H., Determination of shot peening effect on fatigue behavior of AISI 4140 steel by non-destructive measurement of surface residual stresses, Postgraduate, S.ÇALIŞKAN(Student), 2018

GÜR C. H., Determination of residual stress state in SAE/AISI 8620 carburized steel by non-destructive testing methods, Postgraduate, T.Kaleli(Student), 2017

GÜR C. H., YURTIŞIK K., Investigation of key-hole weldability of line pipe steel grade X70M in terms of fracture toughness, Postgraduate, M.ÇAĞIRICI(Student), 2017

GÜR C. H., Numerical prediction and experimental investigation of fretting fatigue crack initiation at railway axle-wheel contacts, Doctorate, G.GÜRER(Student), 2017

GÜR C. H., Nondestructive monitoring of the variations in microstructure and residual stress in carburized steels, Postgraduate, H.Hızlı(Student), 2016

GÜR C. H., Utilization of friction stir processing to improve the mechanical properties of gas metal arc welded 5083 aluminum alloy plates, Postgraduate, S.TAKHT(Student), 2016

BATIGÜN C., GÜR C. H., Numerical investigation of residual stresses, distortion and microstructure evolution in multi-pass welded steel components, Doctorate, N.GARIPOVA(Student), 2016

GÜR C. H., Chemical expansion in manganites, Postgraduate, M.HAZAR(Student), 2015

GÜR C. H., Effect of friction stir processing on fracture toughness and crack growth behaviour of fusion welded 5083 grade aluminum plates, Postgraduate, G.AKÇAY(Student), 2015

GÜR C. H., Investigating the reliability of ultrasound phased array method and conventional ultrasonic testing for detection of defects in austenitic stainless steels, Postgraduate, B.AKGÜN(Student), 2015

GÜR C. H., Characterization of SAE 52100 bearing steel for finite element simulation of through-hardening process /, Postgraduate, O.MÜŞTAK(Student), 2014

KALAY Y. E., GÜR C. H., Investigation of microstructural homogeneity and thermal stability of equal channel angular pressed and aged 2024 Al alloy, Doctorate, G.KOTAN(Student), 2014

GÜR C. H., 304L östenitik paslanmaz çeliklerin alın kaynak işlemlerinde oluşan kalıntı gerilmelerin sayısal analizi ve deneysel ölçülmesi, Postgraduate, A.AZHDARFAEGHİBONAB(Student), 2014

GÜR C. H., EFFECTS OF FRICTION STIR PROCESSING ON MICROSTRUCTURE AND FATIGUE CRACK GROWTH BEHAVIOUR OF GAS METAL ARC (GMA) WELDED 5059 ALUMINUM ALLOY, Postgraduate, C.YAZGANARIKAN(Student), 2014

GÜR C. H., Comparison of the flaw detection abilities of phased array and conventional ultrasonic testing methods in various steels /, Postgraduate, M.YALÇIN(Student), 2014

GÜR C. H., Investigating the effect of deformation and annealing texture on magnetic anisotropy in low-C steel sheets by magnetic Barkhausen noise method, Postgraduate, F.Ümit(Student), 2013

GÜR C. H., BATIGÜN C., Non-destructive evaluation of residual stresses in the multi-pass steel weldments, Postgraduate, G.Erian(Student), 2012

GÜR C. H., Investigation of the effects of equal channel angular extrusion on light weight alloys, Doctorate, P.KARPUZ(Student), 2012

GÜR C. H., GÜRBÜZ R., Microstructural and mechanical characterization of duplex stainless steel grade 2205 joined by hybrid plasma and gas metal arc welding, Postgraduate, B.TOLUNGÜÇ(Student), 2012

ÖGEL B., GÜR C. H., Severe plastic deformation of age hardenable aluminum alloys, Doctorate, E.TAN(Student), 2012

GÜR C. H., Gür C., Determining surface residual stress in steel sheets after deep drawing and bulging processes, Postgraduate, S.Adıgüzel(Student), 2011

GÜR C. H., Experimental investigation of residual stresses introduced via shot peening and their effect on fatigue life of ball bearings, Postgraduate, A.Küçükylmaz(Student), 2010

GÜR C. H., Gür C., Analytical, numerical and experimental investigation of the distortion behavior of steel shafts during through-hardening, Postgraduate, B.Pelin(Student), 2010

ÖGEL B., GÜR C. H., Design and production of a dissimilar channel angular pressing system to obtain high strength aluminum alloy sheets, Postgraduate, G.EMRE(Student), 2009

GÜR C. H., Characterization of ultra-fine grained steel samples produced by high pressure torsion via magnetic barkhausen noise analysis, Postgraduate, S.Bayramoğlu(Student), 2009

GÜR C. H., 3D finite element simulation of steel quenching in order to determine the microstructure and residual stresses, Doctorate, C.ŞİMŞİR(Student), 2008

GÜR C. H., Characterization of dual phase steels by using magnetic barkhausen noise analysis, Postgraduate, M.KAPLAN(Student), 2006

GÜR C. H., Characterization of steel microstructures by magnetic barkhausen noise technique, Postgraduate, K.Davut(Student), 2006

GÜR C. H., Microstructural characterization of hypoeutectoid steels quenched from the Ae1 - Ae3 intercritical temperature range by magnetic barkhausen noise technique, Postgraduate, B.Boyacıoğlu(Student), 2006

GÜR C. H., Investigation of the deep drawability of steel and aluminum sheets by finite element simulation, Postgraduate, Ç.Sönmez(Student), 2005

GÜR C. H., Finite element modeling of stress evolution in quenching process, Postgraduate, D.Doğu(Student), 2005

GÜR C. H., Effects of heat treatment and chemical composition on microstructure and mechanical properties of hadfield steels, Postgraduate, S.Alyaz(Student), 2003

Gür H., Investigation of the effect of spinning process on the mechanical properties and microstructure of AISI/SAE 4140 steel, Postgraduate, E.Burçak(Student), 2001

GÜR C. H., Computer modeling with ansys software to investigate the evolution of thermal stresses during quenching, Postgraduate, R.Eren(Student), 2001

GÜR C. H., Computer modeling with ANSYS software to investigate the evaluation of thermal stresses and residual stresses during quenching, Postgraduate, R.EREN(Student), 2001

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

- I. **Influence of Shielding Gas on the Microstructure and Mechanical Properties of Duplex Stainless Steel in Wire Arc Additive Manufacturing**  
Akbarzadeh E., YURTIŞIK K., Hakan Gür C. H., Saeid T., Tavangar R.  
METALS AND MATERIALS INTERNATIONAL, vol.30, no.7, pp.1977-1996, 2024 (SCI-Expanded)
- II. **The effects of SLM process parameters on the relative density and hardness of austenitic stainless steel 316L**  
Bakhtiarian M., Omidvar H., Mashhuriazar A., Sajuri Z., GÜR C. H.  
Journal of Materials Research and Technology, vol.29, pp.1616-1629, 2024 (SCI-Expanded)
- III. **Determination of the anisotropy in mechanical properties of laser powder bed fusion Inconel 718 by ultrasonic testing**  
Alay T. K., Cagirici M., Yagmur A., Gür C. H.  
NONDESTRUCTIVE TESTING AND EVALUATION, pp.1-19, 2024 (SCI-Expanded)
- IV. **Investigating the Effects of CoMoCrSi Powder Composition and Particle Size, and Annealing Heat Treatment on Microstructure and Mechanical and Tribological Performance of HVOF Sprayed Coatings**  
Ertürk M. T., Tirkeş S., Gür C. H.  
Metals and Materials International, 2024 (SCI-Expanded)
- V. **Tailoring the microstructure and mechanical properties of IN718 alloy via a novel scanning strategy implemented in laser powder bed fusion**  
KALELİ ALAY T., Cagirici M., Yalcin M. Y., Yagmur A., TİRKEŞ S., AYDOĞAN GÜNGÖR E., GÜR C. H.  
Materials Science and Engineering: A, vol.884, 2023 (SCI-Expanded)
- VI. **Investigating the Effects of Repair Welding on Microstructure, Mechanical Properties, and Corrosion Behavior of IN-939 Superalloy**  
Mashhuriazar A., Badihehaghdam M., GÜR C. H., ERTÜRK M. T., BATIGÜN C., TİRKEŞ S., Sajuri Z., Omidvar H.  
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.32, no.15, pp.7016-7028, 2023 (SCI-Expanded)
- VII. **Effects of heat input on metallurgical behavior in HAZ of multi-pass and multi-layer welded IN-939 superalloy**  
Mashhuriazar A., GÜR C. H., Sajuri Z., Omidvar H.  
Journal of Materials Research and Technology, vol.15, pp.1590-1603, 2021 (SCI-Expanded)
- VIII. **Effect of Welding Parameters on the Liquation Cracking Behavior of High-Chromium Ni-Based Superalloy**  
Mashhuriazar A., Omidvar H., GÜR C. H., Sajuri Z.  
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.29, no.12, pp.7843-7852, 2020 (SCI-Expanded)
- IX. **Effects of Pre-Weld Heat Treatment and Heat Input on Metallurgical and Mechanical Behaviour in HAZ of Multi-Pass Welded IN-939 Superalloy**  
Mashhuriazar A., Omidvar H., Sajuri Z., GÜR C. H., Baghdadi A. H.  
METALS, vol.10, no.11, 2020 (SCI-Expanded)
- X. **Determination of surface residual stresses in carburised AISI 8620 steel by the magnetic Barkhausen noise method**

- Kaleli T., GÜR C. H.  
INSIGHT, vol.62, no.7, pp.416-421, 2020 (SCI-Expanded)
- XI. **Effect of microstructural modification on damage tolerance of 34CrMo4 shaft steel**  
Ozcan B., Gurer G., GÜR C. H.  
FATIGUE & FRACTURE OF ENGINEERING MATERIALS & STRUCTURES, vol.43, no.6, pp.1214-1225, 2020 (SCI-Expanded)
- XII. **Investigating the correlation between magnetic Barkhausen noise emission and the fatigue life of shot-peened AISI 4140 steel**  
Çalışkan S., GÜR C. H.  
Insight: Non-Destructive Testing and Condition Monitoring, vol.61, no.12, pp.701-705, 2019 (SCI-Expanded)
- XIII. **Failure analysis of fretting fatigue initiation and growth on railway axle press-fits**  
GURER G., GÜR C. H.  
ENGINEERING FAILURE ANALYSIS, vol.84, pp.151-166, 2018 (SCI-Expanded)
- XIV. **Applicability of the Magnetic Barkhausen Noise Method for Nondestructive Measurement of Residual Stresses in the Carburized and Tempered 19CrNi5H Steels**  
HIZLI H., GÜR C. H.  
RESEARCH IN NONDESTRUCTIVE EVALUATION, vol.29, no.4, pp.221-236, 2018 (SCI-Expanded)
- XV. **Comparison of Electronic Speckle Laser Interferometry Hole-Drilling and X-ray Diffraction Techniques for Determination of Residual Stresses in the Heat Treated Steels**  
HIZLI H., GÜR C. H.  
JOURNAL OF NONDESTRUCTIVE EVALUATION, vol.36, no.2, 2017 (SCI-Expanded)
- XVI. **Long-term thermal stability of Equal Channel Angular Pressed 2024 aluminum alloy**  
TAN G., KALAY Y. E., GÜR C. H.  
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.677, pp.307-315, 2016 (SCI-Expanded)
- XVII. **Investigating the effects of subsequent weld passes on surface residual stresses in steel weld merits by Magnetic Barkhausen Noise technique**  
GÜR C. H., Erian G., BATIGÜN C., ÇAM İ.  
Materials Evaluation, vol.74, no.3, pp.418-423, 2016 (SCI-Expanded)
- XVIII. **Investigating the Effects of Subsequent Weld Passes on Surface Residual Stresses in Steel Weldments by Magnetic Barkhausen Noise Technique**  
GÜR C. H., Erian G., BATIGÜN C., ÇAM İ.  
MATERIALS EVALUATION, vol.74, no.3, pp.418-423, 2016 (SCI-Expanded)
- XIX. **Investigating the formation of intermetallic compounds during friction stir welding of magnesium alloy to aluminum alloy in air and under liquid nitrogen**  
Mofid M. A., Abdollah-zadeh A., Guer C. H.  
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.71, pp.1493-1499, 2014 (SCI-Expanded)
- XX. **Numerical and experimental determination of the residual stress state in multipass welded API 5LX70 plates**  
Garipova N., BATIGÜN C., GÜR C. H.  
Materialprüfung/Materials Testing, vol.56, no.10, pp.831-836, 2014 (SCI-Expanded)
- XXI. **Numerical and Experimental Determination of the Residual Stress State in Multipass Welded API 5L X70 Plates**  
Garipova N., BATIGÜN C., GÜR C. H.  
MATERIALS TESTING, vol.56, no.10, pp.831-836, 2014 (SCI-Expanded)
- XXII. **Characterization of Duplex Stainless Steel Weld Metals Obtained by Hybrid Plasma-Gas Metal Arc Welding**  
YURTIŞIK K., TİRKEŞ S., Dykhno I., GÜR C. H., GÜRBÜZ R.  
SOLDAGEM & INSPECAO, vol.18, no.3, pp.207-216, 2013 (SCI-Expanded)
- XXIII. **Homogenization of ECAPed Al 2024 alloy through age-hardening**

- KOTAN G., TAN E., KALAY Y. E., GÜR C. H.  
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.559, pp.601-606, 2013 (SCI-Expanded)
- XXIV. **Submerged Friction-Stir Welding (SFSW) Underwater and Under Liquid Nitrogen: An Improved Method to Join Al Alloys to Mg Alloys**  
Mofid M. A., Abdollah-Zadeh A., Ghaini F. M., GÜR C. H.  
METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, no.13, pp.5106-5114, 2012 (SCI-Expanded)
- XXV. **Determining the Elastic Properties of Modified Polystyrenes by Sound Velocity Measurements**  
Oral I., Guzel H., Ahmetli G., GÜR C. H.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.121, no.6, pp.3425-3432, 2011 (SCI-Expanded)
- XXVI. **Mechanical and microstructural characterization of 6061 aluminum alloy strips severely deformed by Dissimilar Channel Angular Pressing**  
Tan E., KİBAR A. A., Gur C. H.  
MATERIALS CHARACTERIZATION, vol.62, no.4, pp.391-397, 2011 (SCI-Expanded)
- XXVII. **Monitoring variation of surface residual stresses in shot peened steel components by the magnetic Barkhausen noise method**  
SAVAŞ S., GÜR C. H.  
INSIGHT, vol.52, no.12, pp.672-677, 2010 (SCI-Expanded)
- XXVIII. **Monitoring the Microstructural Evolution in Spheroidized Steels by Magnetic Barkhausen Noise Measurements**  
DAVUT K., GÜR C. H.  
JOURNAL OF NONDESTRUCTIVE EVALUATION, vol.29, no.4, pp.241-247, 2010 (SCI-Expanded)
- XXIX. **INFLUENCE OF DCAP PROCESS ON THE MECHANICAL PROPERTIES OF 6061 Al-ALLOY SHEET**  
Tan E., GÜR C. H.  
REVIEWS ON ADVANCED MATERIALS SCIENCE, vol.25, no.2, pp.189-193, 2010 (SCI-Expanded)
- XXX. **Quantitative analysis of the influence of strain hardening on equal channel angular pressing process**  
ŞİMŞİR C., Karpuz P., GÜR C. H.  
COMPUTATIONAL MATERIALS SCIENCE, vol.48, no.3, pp.633-639, 2010 (SCI-Expanded)
- XXXI. **Characterization of ultra-fine grained steel samples produced by high pressure torsion via magnetic Barkhausen noise analysis**  
Bayramoglu S., GÜR C. H., Alexandrov I. V., Abramova M. M.  
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.527, pp.927-933, 2010 (SCI-Expanded)
- XXXII. **A Simulation of the Quenching Process for Predicting Temperature, Microstructure and Residual Stresses**  
Simsir C., GÜR C. H.  
STROJNISKI VESTNIK-JOURNAL OF MECHANICAL ENGINEERING, vol.56, no.2, pp.93-103, 2010 (SCI-Expanded)
- XXXIII. **Non-destructive determination of residual stress state in steel weldments by Magnetic Barkhausen Noise technique**  
YELBAY H. İ., ÇAM İ., Guer C. H.  
NDT & E INTERNATIONAL, vol.43, no.1, pp.29-33, 2010 (SCI-Expanded)
- XXXIV. **Investigating the effects of hardening of aluminium alloys on equal-channel angular pressing-A finite-element study**  
Karpuz P., Simsir C., GÜR C. H.  
Materials Science and Engineering A, vol.503, pp.148-151, 2009 (SCI-Expanded)
- XXXV. **A review on modeling and simulation of quenching**  
Şimşir C., Hakan Gür C. H.  
Journal of ASTM International, vol.6, no.2, 2009 (SCI-Expanded)
- XXXVI. **A FEM based framework for simulation of thermal treatments: Application to steel quenching**  
Şimşir C., GÜR C. H.

- COMPUTATIONAL MATERIALS SCIENCE, vol.44, no.2, pp.588-600, 2008 (SCI-Expanded)
- XXXVII. **Utilization of Non-destructive Methods for Determining the Effect of Age-Hardening on Impact Toughness of 2024 Al-Cu-Mg Alloy**  
GÜR C. H., Yildiz I.  
JOURNAL OF NONDESTRUCTIVE EVALUATION, vol.27, no.4, pp.99-104, 2008 (SCI-Expanded)
- XXXVIII. **3D FEM simulation of steel quenching and investigation of the effect of asymmetric geometry on residual stress distribution**  
Simsir C., GÜR C. H.  
JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, vol.207, pp.211-221, 2008 (SCI-Expanded)
- XXXIX. **Investigation of the variations in microstructure and mechanical properties of dual-matrix ductile iron by Magnetic Barkhausen Noise analysis**  
GÜR C. H., Ozer M., Erdogan M.  
RESEARCH IN NONDESTRUCTIVE EVALUATION, vol.19, no.1, pp.44-60, 2008 (SCI-Expanded)
- XL. **EFFECT OF ECAP AND POST-AGING PROCESSES ON 2024 ALUMINUM ALLOY**  
Saraloglu E., Tan E., GÜR C. H.  
STEEL RESEARCH INTERNATIONAL, pp.467-471, 2008 (SCI-Expanded)
- XLI. **Characterization of dual-phase steels using magnetic barkhausen noise technique**  
KAPLAN M., Guer C. H., Erdogan M.  
JOURNAL OF NONDESTRUCTIVE EVALUATION, vol.26, pp.79-87, 2007 (SCI-Expanded)
- XLII. **Monitoring the microstructural changes during tempering of quenched SAE 5140 steel by magnetic barkhausen noise**  
Davut K., Guer C. H.  
JOURNAL OF NONDESTRUCTIVE EVALUATION, vol.26, pp.107-113, 2007 (SCI-Expanded)
- XLIII. **Comparison of magnetic Barkhausen noise and ultrasonic velocity measurements for microstructure evaluation of SAE 1040 and SAE 4140 steels**  
Gur C. H., Cam I.  
MATERIALS CHARACTERIZATION, vol.58, no.5, pp.447-454, 2007 (SCI-Expanded)
- XLIV. **Determination of the influence of TiO<sub>2</sub> on the elastic properties of a mica based glass ceramic by ultrasonic velocity measurements**  
Gur C. H., Ozturk A.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.351, pp.3655-3662, 2005 (SCI-Expanded)
- XLV. **Characterization of microstructural phases of steels by sound velocity measurement**  
Gur C. H., Tuncer B.  
MATERIALS CHARACTERIZATION, vol.55, no.2, pp.160-166, 2005 (SCI-Expanded)
- XLVI. **Microstructural investigation of SAE 1040 steel specimens by ultrasonic measurements**  
Gur C. H., Tuncer B.  
INSIGHT, vol.47, no.7, pp.421-424, 2005 (SCI-Expanded)
- XLVII. **Non-destructive investigation on the effect of precipitation hardening on impact toughness of 7020 Al-Zn-Mg alloy**  
Gur C. H., Yildiz I.  
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.382, pp.395-400, 2004 (SCI-Expanded)
- XLVIII. **Investigation of microstructure-ultrasonic velocity relationship in SiCp-reinforced aluminium metal matrix composites**  
GÜR C. H.  
Materials Science and Engineering A, vol.361, pp.29-35, 2003 (SCI-Expanded)
- XLIX. **Effect of tube spinning and subsequent heat treatments on strength, microstructure and residual stress state of AISI/SAE type 4140 steel**  
Gur C. H., ARDA E.  
MATERIALS SCIENCE AND TECHNOLOGY, vol.19, no.11, pp.1590-1594, 2003 (SCI-Expanded)
- L. **Ultrasonic characterisation of hot-rolled and heat-treated plain carbon steels**

- Gur C., Keles Y.  
INSIGHT, vol.45, no.9, pp.615-620, 2003 (SCI-Expanded)
- LI. **Investigation of the influence of specimen geometry on quench behaviour of steels by X-ray determination of surface residual stresses**  
GÜR C. H.  
International Journal of Mechanical Sciences, vol.44, no.7, pp.1335-1347, 2002 (SCI-Expanded)
- LII. **Numerical investigation of non-homogenous plastic deformation in quenching process**  
GÜR C. H., Tekkaya A. E.  
Materials Science and Engineering A, pp.164-169, 2001 (SCI-Expanded)
- LIII. **Investigation of SiCp reinforced aluminium matrix composites by shear and longitudinal ultrasonic waves**  
GÜR C. H.  
Insight: Non-Destructive Testing and Condition Monitoring, vol.43, no.11, pp.748-750, 2001 (SCI-Expanded)
- LIV. **Non-destructive microstructural characterization of aluminium matrix composites by ultrasonic techniques**  
GÜR C. H., ÖGEL B.  
Materials Characterization, vol.47, pp.227-233, 2001 (SCI-Expanded)
- LV. **Microstructural characterisation of ductile irons by measuring velocity and apparent attenuation of ultrasonic waves**  
Gur C., Aydinmakina B.  
INSIGHT, vol.43, no.11, pp.731-734, 2001 (SCI-Expanded)
- LVI. **Non-Destructive Testing Committee of the Turkish Chamber of Metallurgical Engineers**  
GÜR C. H.  
Insight: Non-Destructive Testing and Condition Monitoring, vol.40, no.9, pp.613-615, 1998 (SCI-Expanded)
- LVII. **The Non-Destructive Testing Committee of the Turkish Chamber of Metallurgical Engineers**  
Gur C.  
INSIGHT, vol.40, no.9, pp.613-615, 1998 (SCI-Expanded)
- LVIII. **Untitled - Comment**  
Gur C.  
INSIGHT, vol.40, no.9, pp.602, 1998 (SCI-Expanded)
- LIX. **Quality management system in non-destructive testing laboratories: Accreditation as a testing laboratory**  
Gur C.  
INSIGHT, vol.40, no.9, pp.621-623, 1998 (SCI-Expanded)
- LX. **Investigation of fatigue and creep damage in steam bailer pipes by ultrasonic testing**  
Tekin B., Gur C., Ankara O.  
INSIGHT, vol.39, no.9, pp.626-629, 1997 (SCI-Expanded)
- LXI. **Investigation of fatigue and creep damage in steam boiler pipes by ultrasonic testing**  
Tekin B., GÜR C. H., Ankara O.  
Insight: Non-Destructive Testing and Condition Monitoring, vol.39, no.9, pp.626-629, 1997 (SCI-Expanded)
- LXII. **Effect of boundary conditions and workpiece geometry on residual stresses and microstructure in quenching process**  
GÜR C. H., TEKKAYA E., Schuler W.  
STEEL RESEARCH, vol.67, no.11, pp.501-506, 1996 (SCI-Expanded)
- LXIII. **Finite element simulation of quench hardening**  
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## Activities in Scientific Journals

Metals And Materials International, Committee Member, 2021 - Continues

Int. J of Microstructure & Materials Properties (IJMMP) \_ Inderscience Publ, Committee Member, 2005 - Continues

## Scientific Refereeing

TUBITAK Project, 1002 - Quick Support Program, Middle East Technical University, Turkey, September 2022

NDT AND E INTERNATIONAL, SCI Journal, August 2022

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, June 2022

TUBITAK Project, 1505 - University-Industry Cooperation Support Program, Middle East Technical University, Turkey, April 2022

TUBITAK Project, 1505 - University-Industry Cooperation Support Program, Middle East Technical University, Turkey, April 2022

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, SCI Journal, January 2022

NONDESTRUCTIVE TESTING AND EVALUATION, Journal Indexed in SCI-E, August 2020

12th European Conference on Non-Destructive Testing , Other journals, August 2017

Materials Science & Engineering B , SCI Journal, July 2017

Applied Acoustics, SCI Journal, July 2017

International Journal of Materials Research , SCI Journal, February 2017

ISTM - Springer, SCI Journal, February 2017

Journal of Magnetism and Magnetic Materials , SCI Journal, February 2017

International Journal of Microstructure and Materials Properties - Inderscience Publ, Other Indexed Journal, January 2017

Rare Metals, SCI Journal, January 2017

## Tasks In Event Organizations

Şimşir C., Gür C. H., International Cold Forging Group, 56th Plenary Meeting, Workshop Organization, Ankara, Turkey, Eylül 2023

Gür C. H., ICMATSE: Int Conf Adv Mater Sci & Eng and High-Tech Device Appl, Scientific Congress, Ankara, Turkey, Ekim 2022

Gür C. H., Keleş Ö., Orhan G., Ercan B., 20th International Metallurgy and Materials Congress , Scientific Congress, Turkey, Haziran 2021



## Metrics

Publication: 154

Citation (WoS): 921

Citation (Scopus): 1307

H-Index (WoS): 17

H-Index (Scopus): 20

## Congress and Symposium Activities

Advances in Welding & Metal Additive Manuf. Technologies, Invited Speaker, İstanbul, Turkey, 2023

3rd Int. Materials Technologies and Metallurgy Conf., Invited Speaker, İstanbul, Turkey, 2023

Endüstri 4.0-PLM, Ege Üniversitesi, TÜBİTAK 2737 A etkinliği, Invited Speaker, İzmir, Turkey, 2023

Endüstri 4.0-PLM, Ege Üniv., TUBITAK 2237-A etkinliği, Invited Speaker, İzmir, Turkey, 2022

International Conf on Adv Mater Sci & Eng and High Tech Devices Applications , Invited Speaker, Ankara, Turkey, 2022

Bosphorus International Heat Treatment Symposium, Invited Speaker, İstanbul, Turkey, 2022

10. Ulusal Kaynak Teknolojisi Kongresi, Attendee, Ankara, Turkey, 2017

12th Int. Conf. on Barkhausen Noise and Micromagnetic Testing, Attendee, Dresden, Germany, 2017

14th Int Conf. of Slovenian Soc. for NDT, Attendee, Ljubljana, Slovenia, 2017

TMS 2017, Attendee, California, United States Of America, 2017

## Invited Talks

WAM 2023 Advances in Welding & Metal Additive Manuf. Technologies, Conference, Istanbul Gedik University, Turkey, October 2023

3rd International Materials Technologies and Metallurgy Conf., Conference, Istanbul Technical University, Turkey, October 2023

International Conf on Adv Mater Sci & Eng and High Tech Devices Applications (ICMATSE 2022), Conference, Gazi University, Turkey, October 2022

Bosphorus International Heat Treatment Symposium, Conference, Heat Treatment Industrialists Association, Turkey, May 2022

International Conference on Adv Mater Sci & Eng and High Tech Devices Applications (ICMATSE 2020), Conference, Gazi University, Turkey, October 2020

Int. Materials Technologies and Metallurgy Conf., Conference, Istanbul Technical University, Turkey, October 2019

Non-Destructive Testing and Materials Characterization, Seminar, Northeastern University, Shenyang, China, July 2019

Modelling of phase transformations during quenching of steels, Seminar, Bay Zoltan Institute for Materials Sci and Technology, Budapest, Hungary, July 2004

A finite element model for quenching of steels, Seminar, Otto-von-Guericke University, Magdeburg, Germany, July 2004

## Awards

GÜR C. H., 2010 Fellowship Award, International Federation of Heat Treatment and Surface Engineering (IFHTSE), September 2010