C H Hakan GÃ¼r

List of Publications by Year
in descending order

53 papers	1,048 citations	471509 17 h-index	434195 31 g-index
54 all docs	54 docs citations	54 times ranked	773 citing authors

#	Article	IF	Citations
1	3D FEM simulation of steel quenching and investigation of the effect of asymmetric geometry on residual stress distribution. Journal of Materials Processing Technology, 2008, 207, 211-221.	6.3	98
2	Non-destructive determination of residual stress state in steel weldments by Magnetic Barkhausen Noise technique. NDT and E International, 2010, 43, 29-33.	3.7	95
3	Submerged Friction-Stir Welding (SFSW) Underwater and Under Liquid Nitrogen: An Improved Method to Join Al Alloys to Mg Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 5106-5114.	2.2	89
4	Investigating the formation of intermetallic compounds during friction stir welding of magnesium alloy to aluminum alloy in air and under liquid nitrogen. International Journal of Advanced Manufacturing Technology, 2014, 71, 1493-1499.	3.0	73
5	A FEM based framework for simulation of thermal treatments: Application to steel quenching. Computational Materials Science, 2008, 44, 588-600.	3.0	72
6	Numerical investigation of non-homogeneous plastic deformation in quenching process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 164-169.	5.6	46
7	Comparison of magnetic Barkhausen noise and ultrasonic velocity measurements for microstructure evaluation of SAE 1040 and SAE 4140 steels. Materials Characterization, 2007, 58, 447-454.	4.4	43
8	Monitoring the Microstructural Changes During Tempering ofÂQuenched SAE 5140 steel by Magnetic Barkhausen Noise. Journal of Nondestructive Evaluation, 2007, 26, 107-113.	2.4	41
9	Failure analysis of fretting fatigue initiation and growth on railway axle press-fits. Engineering Failure Analysis, 2018, 84, 151-166.	4.0	40
10	Non-destructive investigation on the effect of precipitation hardening on impact toughness of 7020 Alâ€"Znâ€"Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 382, 395-400.	5.6	39
11	Characterization of microstructural phases of steels by sound velocity measurement. Materials Characterization, 2005, 55, 160-166.	4.4	37
12	Characterization of Dual-Phase Steels Using Magnetic Barkhausen Noise Technique. Journal of Nondestructive Evaluation, 2007, 26, 79-87.	2.4	34
13	Characterization of ultra-fine grained steel samples produced by high pressure torsion via magnetic Barkhausen noise analysis. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 927-933.	5.6	34
14	Mechanical and microstructural characterization of 6061 aluminum alloy strips severely deformed by Dissimilar Channel Angular Pressing. Materials Characterization, 2011, 62, 391-397.	4.4	25
15	Investigation of microstructureâ€"ultrasonic velocity relationship in SiCp-reinforced aluminium metal matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 361, 29-35.	5.6	23
16	Homogenization of ECAPed Al 2024 alloy through age-hardening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 601-606.	5.6	21
17	Characterization of duplex stainless steel weld metals obtained by hybrid plasma-gas metal arc welding. Soldagem E Inspecao, 2013, 18, 207-216.	0.6	19
18	Investigation of the influence of specimen geometry on quench behaviour of steels by X-ray determination of surface residual stresses. International Journal of Mechanical Sciences, 2002, 44, 1335-1347.	6.7	17

#	Article	IF	Citations
19	Non-destructive microstructural characterization of aluminium matrix composites by ultrasonic techniques. Materials Characterization, 2001, 47, 227-233.	4.4	16
20	Long-term thermal stability of Equal Channel Angular Pressed 2024 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 307-315.	5.6	14
21	Effects of heat input on metallurgical behavior in HAZ of multi-pass and multi-layer welded IN-939 superalloy. Journal of Materials Research and Technology, 2021, 15, 1590-1603.	5.8	14
22	Monitoring the Microstructural Evolution in Spheroidized Steels by Magnetic Barkhausen Noise Measurements. Journal of Nondestructive Evaluation, 2010, 29, 241-247.	2.4	13
23	Quantitative analysis of the influence of strain hardening on equal channel angular pressing process. Computational Materials Science, 2010, 48, 633-639.	3.0	13
24	Applicability of the Magnetic Barkhausen Noise Method for Nondestructive Measurement of Residual Stresses in the Carburized and Tempered 19CrNi5H Steels. Research in Nondestructive Evaluation, 2018, 29, 221-236.	1.1	13
25	Investigating the effects of hardening of aluminium alloys on equal-channel angular pressingâ€"A finite-element study. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 503, 148-151.	5.6	11
26	Effect of tube spinning and subsequent heat treatments on strength, microstructure and residual stress state of AISI/SAE type 4140 steel. Materials Science and Technology, 2003, 19, 1590-1594.	1.6	10
27	Determination of the influence of TiO2 on the elastic properties of a mica based glass ceramic by ultrasonic velocity measurements. Journal of Non-Crystalline Solids, 2005, 351, 3655-3662.	3.1	10
28	Utilization of Non-destructive Methods for Determining the Effect of Age-Hardening on Impact Toughness of 2024 Alâ€"Cuâ€"Mg Alloy. Journal of Nondestructive Evaluation, 2008, 27, 99-104.	2.4	10
29	Determining the elastic properties of modified polystyrenes by sound velocity measurements. Journal of Applied Polymer Science, 2011, 121, 3425-3432.	2.6	10
30	Ultrasonic characterisation of hot-rolled and heat-treated plain carbon steels. Insight: Non-Destructive Testing and Condition Monitoring, 2003, 45, 615-620.	0.6	9
31	Effect of Welding Parameters on the Liquation Cracking Behavior of High-Chromium Ni-Based Superalloy. Journal of Materials Engineering and Performance, 2020, 29, 7843-7852.	2.5	9
32	Effects of Pre-Weld Heat Treatment and Heat Input on Metallurgical and Mechanical Behaviour in HAZ of Multi-Pass Welded IN-939 Superalloy. Metals, 2020, 10, 1453.	2.3	9
33	Review of Residual Stress Measurement by Magnetic Barkhausen Noise Technique. Materials Performance and Characterization, 2018, 7, 504-525.	0.3	8
34	Comparison of Electronic Speckle Laser Interferometry Hole-Drilling and X-ray Diffraction Techniques for Determination of Residual Stresses in the Heat Treated Steels. Journal of Nondestructive Evaluation, 2017, 36, 1.	2.4	6
35	Investigation of the Variations in Microstructure and Mechanical Properties of Dual-Matrix Ductile Iron by Magnetic Barkhausen Noise Analysis. Research in Nondestructive Evaluation, 2008, 19, 44-60.	1.1	5
36	Monitoring variation of surface residual stresses in shot peened steel components by the magnetic Barkhausen noise method. Insight: Non-Destructive Testing and Condition Monitoring, 2010, 52, 672-677.	0.6	4

#	Article	IF	Citations
37	Determination of surface residual stresses in carburised AISI 8620 steel by the magnetic Barkhausen noise method. Insight: Non-Destructive Testing and Condition Monitoring, 2020, 62, 416-421.	0.6	4
38	Simulation of Quenching: A Review. Materials Performance and Characterization, 2012, 1, 104479.	0.3	3
39	Investigation of as-quenched and tempered commercial steels by Magnetic Barkhausen Noise method. International Journal of Microstructure and Materials Properties, 2006, 1, 208.	0.1	2
40	Simulation of equal channel angular pressing applied to produce structures with ultrafine-sized grains. International Journal of Microstructure and Materials Properties, 2009, 4, 356.	0.1	2
41	A new framework for simulation of heat treatments. International Journal of Microstructure and Materials Properties, 2010, 5, 399.	0.1	2
42	Microstructural investigation of SAE 1040 steel specimens by ultrasonic measurements. Insight: Non-Destructive Testing and Condition Monitoring, 2005, 47, 421-424.	0.6	1
43	Investigation of Microstructure Inhomogeneity in SiC$_p$-Reinforced Aluminum Matrix Composites. Materials Science Forum, 2007, 534-536, 901-904.	0.3	1
44	Metallurgical influence on quench distortion of SAE 52100 long cylinders. International Heat Treatment and Surface Engineering, 2011, 5, 57-60.	0.2	1
45	Description of the PM Process by Using Ishikawa-Analysis. Materials Science Forum, 2013, 752, 48-56.	0.3	1
46	Numerical and Experimental Determination of the Residual Stress State in Multipass Welded API 5L X70 Plates*. Materialpruefung/Materials Testing, 2014, 56, 831-836.	2.2	1
47	Comparison of the Deep Drawability of Aluminum and Steel using Numerical Simulation Experiments. AIP Conference Proceedings, 2005, , .	0.4	0
48	Microstructure Characterization of SiC<sub>p</sub>-Reinforced Aluminum Matrix Composites by Newly Developed Computer-Based Algorithms. Materials Science Forum, 2007, 534-536, 909-912.	0.3	0
49	Finite Element Investigation of the Effect of Hardening Behavior of Alloys on Equal Channel Angular Pressing Performance. Materials Science Forum, 2008, 584-586, 1021-1026.	0.3	0
50	Investigation of the Microstructure and Hardness of SiC$_P$ Reinforced Aluminum Matrix Composites. Materials Science Forum, 2008, 589, 239-244.	0.3	0
51	Nondestructive Monitoring of Variations of Residual Stresses in Steel Weldments by Magnetic Barkhausen Noise Method. , 2013, , .		0
52	An Empirical Approach to Analyze Creep Rupture Behavior of P91 Steel. Korean Journal of Materials Research, 2021, 31, 255-263.	0.2	0
53	Investigating the correlation between magnetic Barkhausen noise emission and the fatigue life of shot-peened AISI 4140 steel. Insight: Non-Destructive Testing and Condition Monitoring, 2019, 61, 701-705.	0.6	0