

Soran Biroasca

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38

papers

988

citations

16

h-index

31

g-index

40

ext. papers

1,191

ext. citations

5

avg, IF

4.65

L-index

#	Paper	IF	Citations
38	Electron backscatter diffraction study of dislocation content of a macrozone in hot-rolled Ti ₆ Al ₄ V alloy. <i>Scripta Materialia</i> , 2010 , 62, 639-642	5.6	109
37	Effect of grain growth on variant selection and texture memory effect during β phase transformation in Ti ₆ Al ₄ V. <i>Acta Materialia</i> , 2012 , 60, 1048-1058	8.4	106
36	A combined approach to microstructure mapping of an Al ₂ O ₃ /AA2199 friction stir weld. <i>Acta Materialia</i> , 2011 , 59, 3002-3011	8.4	93
35	A quantitative approach to study the effect of local texture and heterogeneous plastic strain on the deformation micromechanism in RR1000 nickel-based superalloy. <i>Acta Materialia</i> , 2014 , 74, 110-124	8.4	71
34	The dislocation behaviour and GND development in a nickel based superalloy during creep. <i>International Journal of Plasticity</i> , 2019 , 118, 252-268	7.6	67
33	The influence of rolling temperature on texture evolution and variant selection during β phase transformation in Ti ₆ Al ₄ V. <i>Acta Materialia</i> , 2012 , 60, 6013-6024	8.4	56
32	3-D observations of short fatigue crack interaction with lamellar and duplex microstructures in a two-phase titanium alloy. <i>Acta Materialia</i> , 2011 , 59, 1510-1522	8.4	52
31	Three-dimensional characterization of fatigue cracks in Ti-6246 using X-ray tomography and electron backscatter diffraction. <i>Acta Materialia</i> , 2009 , 57, 5834-5847	8.4	47
30	The effect of strain distribution on microstructural developments during forging in a newly developed nickel base superalloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 654, 317-328	5.3	46
29	The effects of microstructure and microtexture generated during solidification on deformation micromechanism in IN713C nickel-based superalloy. <i>Acta Materialia</i> , 2018 , 148, 391-406	8.4	35
28	The hierarchy of microstructure parameters affecting the tensile ductility in centrifugally cast and forged Ti-834 alloy during high temperature exposure in air. <i>Acta Materialia</i> , 2016 , 117, 51-67	8.4	29
27	Microstructural and microtextural characterization of oxide scale on steel using electron backscatter diffraction. <i>Journal of Microscopy</i> , 2004 , 213, 235-40	1.9	29
26	The effects of grain size, dendritic structure and crystallographic orientation on fatigue crack propagation in IN713C nickel-based superalloy. <i>International Journal of Plasticity</i> , 2020 , 125, 150-168	7.6	27
25	Microstructural mechanisms and advanced characterization of long and small fatigue crack growth in cast A356-T61 aluminum alloys. <i>International Journal of Fatigue</i> , 2017 , 97, 202-213	5	23
24	Phase determination and microstructure of oxide scales formed on steel at high temperature. <i>Journal of Microscopy</i> , 2005 , 217, 122-9	1.9	23
23	A SANS and APT study of precipitate evolution and strengthening in a maraging steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 702, 414-424	5.3	22
22	The Effect of a Two-Stage Heat-Treatment on the Microstructural and Mechanical Properties of a Maraging Steel. <i>Materials</i> , 2017 , 10,	3.5	16

21	Texture evolution in grain-oriented electrical steel during hot band annealing and cold rolling. <i>Journal of Microscopy</i> , 2008 , 230, 414-23	1.9	16
20	Deformation mechanisms of IN713C nickel based superalloy during Small Punch Testing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 650, 422-431	5.3	14
19	Nanostructure characterisation of flow-formed Cr-Mo-V steel using transmission Kikuchi diffraction technique. <i>Ultramicroscopy</i> , 2015 , 153, 1-8	3.1	14
18	Mechanistic approach of Goss abnormal grain growth in electrical steel: Theory and argument. <i>Acta Materialia</i> , 2020 , 185, 370-381	8.4	14
17	The deformation behaviour of hard and soft grains in RR1000 nickel-based superalloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 82, 012033	0.4	13
16	A study of low cycle fatigue life and its correlation with microstructural parameters in IN713C nickel based superalloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 718, 19-32	5.3	12
15	Oxide formation and alloying elements enrichment on TRIP steel surface during inter-critical annealing. <i>Journal of Microscopy</i> , 2008 , 230, 424-34	1.9	11
14	The nucleation and growth of η phase in nickel-based superalloy during long-term thermal exposure. <i>Acta Materialia</i> , 2020 , 185, 493-506	8.4	11
13	Crystallographic Orientation Relationship with Geometrically Necessary Dislocation Accumulation During High-Temperature Deformation in RR1000 Nickel-Based Superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 534-539	2.3	7
12	Blanking induced damage in thin 3.2% silicon steel sheets. <i>Production Engineering</i> , 2020 , 14, 53-64	1.9	6
11	Crystallographic orientation influence on slip system activation and deformation mechanisms in Waspaloy during in-situ mechanical loading. <i>Journal of Alloys and Compounds</i> , 2021 , 865, 158548	5.7	5
10	Disparity in recrystallization of β & δ fibers and its impact on Cube texture formation in non-oriented electrical steel. <i>Acta Materialia</i> , 2021 , 216, 117141	8.4	4
9	Phase identification of oxide scale on low carbon steel. <i>Materials at High Temperatures</i> , 2005 , 22, 179-184	1.1	3
8	Phase identification of oxide scale on low carbon steel. <i>Materials at High Temperatures</i> , 2005 , 22, 179-184	1.1	2
7	Study of Scale Growth on Steel Substrates Using Electron Back Scatter Diffraction. <i>Materials Science Forum</i> , 2003 , 426-432, 3611-3616	0.4	2
6	On the correlation between magnetic domain and crystallographic grain orientation in grain oriented electrical steels. <i>Journal of Magnetism and Magnetic Materials</i> , 2020 , 494, 165772	2.8	2
5	Microstructure evolution and phase transformation in a nickel-based superalloy with varying Ti/Al ratios: Part 1 - Microstructure evolution. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 831, 142228	5.3	1
4	Microstructure and phases structure in nickel-based superalloy IN713C after solidification. <i>Materials Characterization</i> , 2021 , 182, 111566	3.9	0

- 3 Microstructure evolution and phase transformation in a nickel-based superalloy with varying Ti/Al ratios: Part 2 [Phase transformation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 831, 142229 53
- 2 The Eplot, a multicomponent 1-D pole figure plot, to quantify the heterogeneity of plastic deformation. *Materials Characterization*, **2020**, 160, 110114 39
- 1 The Effect of Elevated Temperature Exposure on the Mechanical Properties of Ti834 **2016**, 1625-1630