

Hamed Mirzadeh

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1042792/publications.pdf>

Version: 2024-02-01

199
papers

7,892
citations

31976

53
h-index

66911

78
g-index

200
all docs

200
docs citations

200
times ranked

3112
citing authors

#	ARTICLE	IF	CITATIONS
1	Transformation-induced plasticity (TRIP) in advanced steels: A review. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 795, 140023.	5.6	307
2	Constitutive relationships for hot deformation of austenite. Acta Materialia, 2011, 59, 6441-6448.	7.9	249
3	Hot deformation behavior of a medium carbon microalloyed steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3876-3882.	5.6	229
4	Prediction of the critical conditions for initiation of dynamic recrystallization. Materials & Design, 2010, 31, 1174-1179.	5.1	219
5	EBSID study of a hot deformed austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 538, 236-245.	5.6	201
6	Hot deformation behavior, dynamic recrystallization, and physically-based constitutive modeling of plain carbon steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 636, 196-202.	5.6	140
7	A review of hot deformation behavior and constitutive models to predict flow stress of high-entropy alloys. Journal of Alloys and Compounds, 2022, 903, 163964.	5.5	130
8	Tailoring the microstructure and mechanical properties of AISI 316L austenitic stainless steel via cold rolling and reversion annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 90-96.	5.6	127
9	Deformation-induced martensite in austenitic stainless steels: A review. Archives of Civil and Mechanical Engineering, 2020, 20, 1.	3.8	127
10	Constitutive analysis of Mg-Al-Zn magnesium alloys during hot deformation. Mechanics of Materials, 2014, 77, 80-85.	3.2	122
11	Flow Curve Analysis of 17-4 PH Stainless Steel under Hot Compression Test. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 2950-2958.	2.2	121
12	Aging kinetics of 17-4 PH stainless steel. Materials Chemistry and Physics, 2009, 116, 119-124.	4.0	115
13	Nano/ultrafine grained austenitic stainless steel through the formation and reversion of deformation-induced martensite: Mechanisms, microstructures, mechanical properties, and TRIP effect. Materials Characterization, 2015, 103, 150-161.	4.4	113
14	Cladding of aluminum on AISI 304L stainless steel by cold roll bonding: Mechanism, microstructure, and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 613, 232-239.	5.6	105
15	Effects of Grain Size on Mechanical Properties and Work-Hardening Behavior of AISI 304 Austenitic Stainless Steel. Steel Research International, 2019, 90, 1900153.	1.8	101
16	Rate controlling mechanisms during hot deformation of Mg-3Gd-1Zn magnesium alloy: Dislocation glide and climb, dynamic recrystallization, and mechanical twinning. Materials & Design, 2015, 68, 228-231.	5.1	97
17	A simple constitutive model for predicting flow stress of medium carbon microalloyed steel during hot deformation. Materials & Design, 2015, 77, 126-131.	5.1	96
18	Toward unraveling the effects of intermetallic compounds on the microstructure and mechanical properties of Mg-Gd-Al-Zn magnesium alloys in the as-cast, homogenized, and extruded conditions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 680, 39-46.	5.6	96

#	ARTICLE	IF	CITATIONS
19	Thermal Mechanisms of Grain Refinement in Steels: A Review. Metals and Materials International, 2021, 27, 2078.	3.4	96
20	Modeling and Prediction of Hot Deformation Flow Curves. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 108-123.	2.2	95
21	Constitutive modeling and prediction of hot deformation flow stress under dynamic recrystallization conditions. Mechanics of Materials, 2015, 85, 66-79.	3.2	94
22	Solidification behavior and Laves phase dissolution during homogenization heat treatment of Inconel 718 superalloy. Vacuum, 2018, 154, 235-243.	3.5	94
23	Microstructural Evolutions During Annealing of Plastically Deformed AISI 304 Austenitic Stainless Steel: Martensite Reversion, Grain Refinement, Recrystallization, and Grain Growth. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 4210-4216.	2.2	89
24	Additive manufacturing – A review of hot deformation behavior and constitutive modeling of flow stress. Current Opinion in Solid State and Materials Science, 2022, 26, 100992.	11.5	88
25	Tailoring the mechanical properties of Mg–Zn magnesium alloy by calcium addition and hot extrusion process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138929.	5.6	84
26	Effect of microstructural refinement and intercritical annealing time on mechanical properties of high-formability dual phase steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 22-26.	5.6	83
27	Hot deformation behavior of austenitic stainless steel for a wide range of initial grain size. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 569, 54-60.	5.6	80
28	Flow stress prediction at hot working conditions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1160-1164.	5.6	79
29	High strain rate superplasticity via friction stir processing (FSP): A review. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 819, 141499.	5.6	77
30	Correlation between processing parameters and strain-induced martensitic transformation in cold worked AISI 301 stainless steel. Materials Characterization, 2008, 59, 1650-1654.	4.4	74
31	Unraveling the Initial Microstructure Effects on Mechanical Properties and Work-Hardening Capacity of Dual-Phase Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 4565-4573.	2.2	73
32	Hot Deformation and Dynamic Recrystallization of 17-4 PH Stainless Steel. ISIJ International, 2013, 53, 680-689.	1.4	72
33	Constitutive analysis of wrought Mg-Gd magnesium alloys during hot compression at elevated temperatures. Journal of Alloys and Compounds, 2019, 791, 1200-1206.	5.5	72
34	Hot deformation and dynamic recrystallization of NiTi intermetallic compound. Journal of Alloys and Compounds, 2014, 614, 56-59.	5.5	71
35	A Simplified Approach for Developing Constitutive Equations for Modeling and Prediction of Hot Deformation Flow Stress. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4027-4037.	2.2	70
36	Enhanced Ductility of a Fine-Grained Mg–Cd–Al–Zn Magnesium Alloy by Hot Extrusion. Advanced Engineering Materials, 2018, 20, 1701171.	3.5	70

#	ARTICLE	IF	CITATIONS
37	Microstructural Evolutions During Reversion Annealing of Cold-Rolled AISI 316 Austenitic Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 2248-2256.	2.2	68
38	A simple Zerilli–Armstrong constitutive equation for modeling and prediction of hot deformation flow stress of steels. <i>Mechanics of Materials</i> , 2016, 94, 38-45.	3.2	67
39	Fine tuning the mechanical properties of dual phase steel via thermomechanical processing of cold rolling and intercritical annealing. <i>Materials Chemistry and Physics</i> , 2019, 230, 1-8.	4.0	66
40	Mechanical properties of a hot deformed Al-Mg ₂ Si in-situ composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 726, 10-17.	5.6	65
41	Micro-mechanisms and precipitation kinetics of delta (δ) phase in Inconel 718 superalloy during aging. <i>Journal of Alloys and Compounds</i> , 2019, 795, 207-212.	5.5	65
42	Heterostructured stainless steel: Properties, current trends, and future perspectives. <i>Materials Science and Engineering Reports</i> , 2022, 150, 100691.	31.8	65
43	The rate of dynamic recrystallization in 17-4 PH stainless steel. <i>Materials & Design</i> , 2010, 31, 4577-4583.	5.1	64
44	Unraveling the effects of Zn addition and hot extrusion process on the microstructure and mechanical properties of as-cast Mg–2Al magnesium alloy. <i>Vacuum</i> , 2019, 167, 214-222.	3.5	62
45	Constitutive behaviors of magnesium and Mg–Zn–Zr alloy during hot deformation. <i>Materials Chemistry and Physics</i> , 2015, 152, 123-126.	4.0	61
46	Constitutive Description of 7075 Aluminum Alloy During Hot Deformation by Apparent and Physically-Based Approaches. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 1095-1099.	2.5	61
47	Quantification of the strengthening effect of rare earth elements during hot deformation of Mg-Gd-Y-Zr magnesium alloy. <i>Journal of Materials Research and Technology</i> , 2016, 5, 1-4.	5.8	60
48	Enhanced mechanical properties of as-cast AZ91 magnesium alloy by combined RE-Sr addition and hot extrusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 792, 139817.	5.6	60
49	Elucidating the effect of intermetallic compounds on the behavior of Mg–Gd–Al–Zn magnesium alloys at elevated temperatures. <i>Journal of Materials Research</i> , 2017, 32, 4186-4195.	2.6	59
50	A comparative study on the hot flow stress of Mg–Al–Zn magnesium alloys using a simple physically-based approach. <i>Journal of Magnesium and Alloys</i> , 2014, 2, 225-229.	11.9	58
51	Modeling the kinetics of deformation-induced martensitic transformation in AISI 316 metastable austenitic stainless steel. <i>Vacuum</i> , 2018, 157, 243-248.	3.5	58
52	Recent advances in the kinetics of normal/abnormal grain growth: a review. <i>Archives of Civil and Mechanical Engineering</i> , 2021, 21, 1.	3.8	58
53	The Effects of Grain Refinement and Rare Earth Intermetallics on Mechanical Properties of As-Cast and Wrought Magnesium Alloys. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 1327-1333.	2.5	57
54	Quantification of the strengthening effect of reinforcements during hot deformation of aluminum-based composites. <i>Materials & Design</i> , 2015, 65, 80-82.	5.1	56

#	ARTICLE	IF	CITATIONS
55	Synergistic effect of Al and Gd on enhancement of mechanical properties of magnesium alloys. Progress in Natural Science: Materials International, 2017, 27, 228-235.	4.4	56
56	Fine-grained dual phase steel via intercritical annealing of cold-rolled martensite. Vacuum, 2018, 155, 147-152.	3.5	56
57	Hot deformation behavior and flow stress modeling of Ti-6Al-4V alloy produced via electron beam melting additive manufacturing technology in single β -phase field. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 792, 139822.	5.6	55
58	Hot compression behavior of GZ31 magnesium alloy. Journal of Alloys and Compounds, 2015, 631, 1-6.	5.5	54
59	Simple physically-based constitutive equations for hot deformation of 2024 and 7075 aluminum alloys. Transactions of Nonferrous Metals Society of China, 2015, 25, 1614-1618.	4.2	54
60	Extrapolation of flow curves at hot working conditions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1856-1860.	5.6	52
61	Modification of Rule of Mixtures for Estimation of the Mechanical Properties of Dual-Phase Steels. Journal of Materials Engineering and Performance, 2017, 26, 2683-2688.	2.5	51
62	Enhanced mechanical properties of AZ91 magnesium alloy by inoculation and hot deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 802, 140667.	5.6	51
63	Abnormal grain growth in AISI 304L stainless steel. Materials Characterization, 2014, 97, 11-17.	4.4	50
64	Synergistic effects of holding time at intercritical annealing temperature and initial microstructure on the mechanical properties of dual phase steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 750, 125-131.	5.6	49
65	Effect of Zn addition on the microstructure and mechanical properties of Mg-0.5Ca-0.5RE magnesium alloy. Journal of Alloys and Compounds, 2020, 815, 152380.	5.5	49
66	Microstructural Evolution During Normal/Abnormal Grain Growth in Austenitic Stainless Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5185-5193.	2.2	44
67	A review of recent progress in mechanical and corrosion properties of dual phase steels. Archives of Civil and Mechanical Engineering, 2020, 20, 1.	3.8	44
68	Processing of Cu-Fe and Cu-Fe-SiC nanocomposites by mechanical alloying. Advanced Powder Technology, 2017, 28, 1882-1887.	4.1	43
69	Elucidating the Effect of Alloying Elements on the Behavior of Austenitic Stainless Steels at Elevated Temperatures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5698-5703.	2.2	42
70	Enhancement of the microstructure and elevated temperature mechanical properties of as-cast Mg-Al ₂ Ca-Mg ₂ Ca in-situ composite by hot extrusion. Materials Characterization, 2019, 147, 155-164.	4.4	41
71	Enhancement of mechanical properties of low carbon dual phase steel via natural aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 178-183.	5.6	39
72	Effect of grain size on the corrosion resistance of low carbon steel. Materials Research Express, 2020, 7, 016522.	1.6	39

#	ARTICLE	IF	CITATIONS
73	Effect of grain size on the mechanical properties and bio-corrosion resistance of pure magnesium. Journal of Materials Research and Technology, 2022, 19, 3100-3109.	5.8	37
74	Effect of Intercritical Annealing on Mechanical Properties and Workâ€Hardening Response of High Formability Dual Phase Steel. Steel Research International, 2018, 89, 1700412.	1.8	36
75	ANN modeling of strain-induced martensite and its applications in metastable austenitic stainless steels. Journal of Alloys and Compounds, 2009, 476, 352-355.	5.5	35
76	Homogenization kinetics of a typical nickel-based superalloy. Journal of Alloys and Compounds, 2019, 793, 277-282.	5.5	35
77	Optimization of turning process using artificial intelligence technology. International Journal of Advanced Manufacturing Technology, 2014, 70, 1205-1217.	3.0	33
78	Microstructural evolution and grain growth kinetics of GZ31 magnesium alloy. Materials Characterization, 2016, 118, 584-592.	4.4	33
79	Tailoring the Microstructure and Mechanical Properties of Dual Phase Steel Based on the Initial Microstructure. Steel Research International, 2017, 88, 1600385.	1.8	33
80	Enhanced mechanical properties of dual-phase steel by repetitive intercritical annealing. Canadian Metallurgical Quarterly, 2017, 56, 459-463.	1.2	31
81	Modeling the reversion of martensite in the cold worked AISI 304 stainless steel by artificial neural networks. Materials & Design, 2009, 30, 570-573.	5.1	30
82	Effect of Intercritical Annealing Conditions on Grain Growth Kinetics of Dual Phase Steel. Metals and Materials International, 2019, 25, 1039-1046.	3.4	30
83	Estimation of the kinetics of martensitic transformation in austenitic stainless steels by conventional and novel approaches. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 624, 256-260.	5.6	29
84	Significance of Martensite Reversion and Austenite Stability to the Mechanical Properties and Transformation-Induced Plasticity Effect of Austenitic Stainless Steels. Journal of Materials Engineering and Performance, 2020, 29, 3233-3242.	2.5	29
85	Refinement of Banded Structure via Thermal Cycling and Its Effects on Mechanical Properties of Dual Phase Steel. Steel Research International, 2018, 89, 1700531.	1.8	28
86	Enhanced mechanical properties of as-cast Mg-Al-Ca magnesium alloys by friction stir processing. Materials Letters, 2021, 296, 129880.	2.6	28
87	A new intermetallic phase formation in Mg Si Ni magnesium-based in-situ formed alloys. Vacuum, 2019, 164, 349-354.	3.5	27
88	Interdiffusion coefficients of alloying elements in a typical Ni-based superalloy. Vacuum, 2019, 169, 108875.	3.5	26
89	Effect of microalloying by Ca on the microstructure and mechanical properties of as-cast and wrought Mgâ€Mg2Si composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 820, 141574.	5.6	26
90	Enhanced Mechanical Properties of Microalloyed Austenitic Stainless Steel Produced by Martensite Treatment. Advanced Engineering Materials, 2015, 17, 1226-1233.	3.5	25

#	ARTICLE	IF	CITATIONS
91	Effect of Si and Ni on microstructure and mechanical properties of in-situ magnesium-based composites in the as-cast and extruded conditions. <i>Materials Chemistry and Physics</i> , 2019, 232, 305-310.	4.0	25
92	Revisiting the Diffusion of Niobium in an As-Cast Nickel-Based Superalloy During Annealing at Elevated Temperatures. <i>Metals and Materials International</i> , 2020, 26, 326-332.	3.4	25
93	Fluidity of Al-Si semisolid slurries during rheocasting by a novel process. <i>Journal of Materials Processing Technology</i> , 2009, 209, 4977-4982.	6.3	24
94	The effect of primary thermo-mechanical treatment on TRIP steel microstructure and mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 639, 402-406.	5.6	24
95	Constitutive modeling of flow stress during hot deformation of Sn-Al-Zn-Cu-Mg multi-principal-element alloy. <i>Vacuum</i> , 2019, 170, 108970.	3.5	24
96	Improved mechanical properties of mild steel via combination of deformation, intercritical annealing, and quench aging. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 756, 268-271.	5.6	24
97	Processing Route Effects on the Mechanical and Corrosion Properties of Dual Phase Steel. <i>Metals and Materials International</i> , 2020, 26, 882-890.	3.4	24
98	Superplasticity of high-entropy alloys: a review. <i>Archives of Civil and Mechanical Engineering</i> , 2022, 22, 1.	3.8	24
99	Prevention of surface hot shortness, development of banded structure, and mechanical properties of hot rolled Cu-bearing steel. <i>Engineering Failure Analysis</i> , 2016, 68, 132-137.	4.0	23
100	Precipitation kinetics of γ' phase and its mechanism in a Nb-bearing nickel-based superalloy during aging. <i>Vacuum</i> , 2020, 178, 109456.	3.5	23
101	Development of dynamic recrystallization maps based on the initial grain size. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 565, 90-95.	5.6	22
102	Unraveling the Effect of Deformation Temperature on the Mechanical Behavior and Transformation-Induced Plasticity of the SUS304L Stainless Steel. <i>Steel Research International</i> , 2020, 91, 2000114.	1.8	22
103	Dynamic recrystallization kinetics in Mg-3Gd-1Zn magnesium alloy during hot deformation. <i>International Journal of Materials Research</i> , 2016, 107, 277-279.	0.3	21
104	A Simple Constitutive Model for Prediction of Single-Peak Flow Curves Under Hot Working Conditions. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2016, 138, .	1.4	20
105	Aging kinetics and mechanical properties of copper-bearing low-carbon HSLA-100 microalloyed steel. <i>Archives of Civil and Mechanical Engineering</i> , 2019, 19, 1409-1418.	3.8	20
106	Processing of fine grained AISI 304L austenitic stainless steel by cold rolling and high-temperature short-term annealing. <i>Materials Research Express</i> , 2018, 5, 056529.	1.6	19
107	Effects of tempering on the mechanical and corrosion properties of dual phase steel. <i>Materials Today Communications</i> , 2020, 22, 100745.	1.9	19
108	Amorphization, mechano-crystallization, and crystallization kinetics of mechanically alloyed AlFeCuZnTi high-entropy alloys. <i>Materials Letters</i> , 2022, 307, 131098.	2.6	19

#	ARTICLE	IF	CITATIONS
109	Modification of As-cast Al-Mg/B4C composite by addition of Zr. Journal of Alloys and Compounds, 2016, 685, 70-77.	5.5	18
110	Toward unraveling the mechanisms responsible for the formation of ultrafine grained microstructure during tempering of cold rolled martensite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 670, 252-255.	5.6	18
111	Mechanical properties of Mg-Al-Mn magnesium alloys with low Al content in the as-cast and extruded conditions. Materials Research Express, 2019, 6, 106521.	1.6	18
112	Molecular dynamics simulation of stress field around edge dislocations in Aluminum. Computational Materials Science, 2014, 84, 83-96.	3.0	17
113	Microstructural investigation of Al-Mg/B4C composite deformed at elevated temperature. Journal of Alloys and Compounds, 2018, 763, 643-651.	5.5	17
114	Effect of Gd on Dynamic Recrystallization Behavior of Magnesium During Hot Compression. Metals and Materials International, 2021, 27, 843-850.	3.4	17
115	Estimating interface bonding strength in clad sheets based on tensile test results. Materials & Design, 2014, 64, 307-309.	5.1	16
116	Developing constitutive equations of flow stress for hot deformation of AZ31 magnesium alloy under compression, torsion, and tension. International Journal of Material Forming, 2019, 12, 643-648.	2.0	16
117	Unexpected formation of delta (δ) phase in as-cast niobium-bearing superalloy at solution annealing temperatures. Materials Letters, 2020, 261, 127008.	2.6	16
118	Enhanced mechanical properties of dual phase steel via cross rolling and intercritical annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 804, 140778.	5.6	16
119	Improvement of mechanical properties of in situ Mg-Si composites via Cu addition and hot working. Journal of Alloys and Compounds, 2022, 905, 164176.	5.5	16
120	Dynamic deformation response of Al-Mg and Al-Mg/B4C composite at elevated temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 712, 645-654.	5.6	15
121	Effects of rheocasting parameters on the microstructure of rheo-centrifuged cast Al-7.1wt%Si alloy. Journal of Alloys and Compounds, 2009, 474, 257-263.	5.5	14
122	Grain refinement and enhanced mechanical properties of ZK20 magnesium alloy via hot extrusion and mischmetal addition. Materials Research Express, 2019, 6, 116522.	1.6	14
123	Amorphization and mechano-crystallization of high-energy ball milled Fe Ti alloys. Journal of Non-Crystalline Solids, 2019, 520, 119466.	3.1	14
124	Mechanical Behavior of As-Cast and Extruded Mg-Si-Ni-Ca Magnesium Alloys. Journal of Materials Engineering and Performance, 2020, 29, 7728-7735.	2.5	14
125	Evolutions of mechanical properties of AISI 304L stainless steel under shear loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 791, 139667.	5.6	14
126	Effects of spheroidization heat treatment and intercritical annealing on mechanical properties and corrosion resistance of medium carbon dual phase steel. Materials Chemistry and Physics, 2021, 257, 123721.	4.0	14

#	ARTICLE	IF	CITATIONS
127	Unraveling the Effect of Homogenization Treatment on Decomposition of Austenite and Mechanical Properties of Low-Alloyed TRIP Steel. Steel Research International, 2016, 87, 820-823.	1.8	13
128	Ferrite recrystallisation and intercritical annealing of cold-rolled low alloy medium carbon steel. Materials Science and Technology, 2019, 35, 1932-1941.	1.6	13
129	Unraveling the Effect of Martensite Volume Fraction on the Mechanical and Corrosion Properties of Low-Carbon Dual-Phase Steel. Steel Research International, 2020, 91, 1900327.	1.8	13
130	Hot deformation behaviour of precipitation hardening stainless steel. Materials Science and Technology, 2010, 26, 501-504.	1.6	12
131	Unraveling the Effect of Thermomechanical Treatment on the Dissolution of Delta Ferrite in Austenitic Stainless Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 641-648.	2.2	12
132	Enhancement of work-hardening behavior of dual phase steel by heat treatment. Materialwissenschaft Und Werkstofftechnik, 2018, 49, 1081-1086.	0.9	12
133	Revealing the As-Cast and Homogenized Microstructures of Niobium-Bearing Nickel-Based Superalloy. International Journal of Metalcasting, 2019, 13, 320-330.	1.9	12
134	Thermodynamics basis of saturation of martensite content during reversion annealing of cold rolled metastable austenitic steel. Vacuum, 2020, 174, 109220.	3.5	12
135	Processing, microstructure adjustments, and mechanical properties of dual phase steels: A review. Materials Science and Technology, 2021, 37, 561-591.	1.6	12
136	Enhanced tensile properties of as-cast Mg-10Al magnesium alloy via strontium addition and hot working. Archives of Civil and Mechanical Engineering, 2021, 21, 1.	3.8	12
137	Superplasticity of bulk metallic glasses (BMGs): A review. Journal of Non-Crystalline Solids, 2022, 583, 121503.	3.1	12
138	Ball milling criteria for producing nano intermetallic compounds. Materials Science and Technology, 2010, 26, 281-284.	1.6	11
139	Deformation of Pure Aluminum Along the Groove Path of ECAP-Conform Process. Advanced Engineering Materials, 2016, 18, 319-323.	3.5	11
140	Evaluating the Effect of Hot-Rolling Reduction on the Mechanical Properties of In Situ Formed Aluminum-Magnesium-Silicon ($\text{Al-Mg}_2\text{Si}$) Composites. Advanced Engineering Materials, 2019, 21, 1900609.	3.5	11
141	Synergistic Effects of Cerium-Based Rare Earth Addition and Hot Deformation on the Microstructure and Mechanical Properties of Mg-0.5Zn-0.5Zr Magnesium Alloy. Metals and Materials International, 2022, 28, 1105-1113.	3.4	11
142	Spheroidization heat treatment and intercritical annealing of low carbon steel. Journal of Mining and Metallurgy, Section B: Metallurgy, 2019, 55, 405-411.	0.8	11
143	Tailoring the mechanical properties of hypereutectic in situ $\text{Al-Mg}_2\text{Si}$ composites via hybrid TiB_2 reinforcement and hot extrusion. Archives of Civil and Mechanical Engineering, 2022, 22, 1.	3.8	11
144	Mechanical properties and fracture behavior of intercritically annealed AISI 4130 chromoly steel. Materials Research Express, 2018, 5, 066548.	1.6	10

#	ARTICLE	IF	CITATIONS
145	Phase transformation mechanism and kinetics during step quenching of st37 low carbon steel. Materials Research Express, 2019, 6, 1165f2.	1.6	10
146	Crystallization kinetics of mechanically alloyed amorphous Fe-Ti alloys during annealing. Advanced Powder Technology, 2020, 31, 3215-3221.	4.1	10
147	Unraveling the effects of surface preparation on the pitting corrosion resistance of austenitic stainless steel. Archives of Civil and Mechanical Engineering, 2020, 20, 1.	3.8	10
148	Finite element analysis of plastic deformation in shear punch test. Materials Letters, 2021, 284, 128953.	2.6	10
149	Tempering of deformed and as-quenched martensite in structural steel. Journal of Mining and Metallurgy, Section B: Metallurgy, 2019, 55, 95-99.	0.8	10
150	Prediction of Proper Temperatures for the Hot Stamping Process Based on the Kinetics Models. Journal of Materials Engineering and Performance, 2015, 24, 572-585.	2.5	9
151	Improved Mechanical Properties of Structural Steel via Developing Bimodal Grain Size Distribution and Intercritical Heat Treatment. Journal of Materials Engineering and Performance, 2019, 28, 5409-5414.	2.5	9
152	Toward understanding the origins of poor ductility in a metal-matrix composite processed by accumulative roll bonding (ARB). Archives of Civil and Mechanical Engineering, 2019, 19, 958-966.	3.8	9
153	Elucidating the effects of microsegregation on the precipitation phenomena in as-cast Nb-bearing superalloy. Materials Letters, 2020, 266, 127481.	2.6	9
154	Phase Transformation Kinetics During Annealing of Cold-Rolled AISI 309Si Stainless Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1955-1959.	2.2	9
155	Effect of Drawing Strain on Development of Martensitic Transformation and Mechanical Properties in AISI 304L Stainless Steel Wire. Steel Research International, 2017, 88, 1600423.	1.8	8
156	Effect of Intercritical Annealing Time at Pearlite Dissolution Finish Temperature (Ac1f) on Mechanical Properties of Low-Carbon Dual-Phase Steel. Journal of Materials Engineering and Performance, 2019, 28, 2178-2183.	2.5	8
157	Detailed Hallâ€Petch Analysis of Cold Rolled and Annealed Duplex 2205 Stainless Steel. Steel Research International, 2022, 93, .	1.8	8
158	Mechanical properties of as-cast and wrought Mgâ€5Ni-xAl magnesium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 840, 142996.	5.6	8
159	Cold unidirectional/cross-rolling of austenitic stainless steels: a review. Archives of Civil and Mechanical Engineering, 2022, 22, .	3.8	8
160	Enhanced mechanical properties of as-cast rare earth bearing magnesium alloy via elevated-temperature homogenization. Materials Today Communications, 2022, 31, 103821.	1.9	8
161	Multiâ€Axial Incremental Forging and Shearing as a New Severe Plastic Deformation Processing Technique. Advanced Engineering Materials, 2015, 17, 1197-1207.	3.5	7
162	Physically based constitutive description of OFHC copper at hot working conditions. Metallic Materials, 2016, 53, 105-111.	0.3	7

#	ARTICLE	IF	CITATIONS
163	Texture development during hot deformation of Al/Mg alloy reinforced with ceramic particles. <i>Journal of Alloys and Compounds</i> , 2019, 798, 267-272.	5.5	7
164	Static recrystallization kinetics of ferrite in cold-deformed medium carbon steel. <i>Materials Research Express</i> , 2019, 6, 1265g9.	1.6	7
165	Estimation of homogenisation time for superalloys based on a new diffusional model. <i>Materials Science and Technology</i> , 2020, 36, 380-384.	1.6	7
166	Effects of hot rolling and homogenisation treatment on low alloy steel ingot. <i>Materials Science and Technology</i> , 2020, 36, 835-842.	1.6	7
167	Delta processing effects on the creep behavior of a typical Nb-bearing nickel-based superalloy. <i>Vacuum</i> , 2021, 184, 109913.	3.5	7
168	Tempering kinetics and corrosion resistance of quenched and tempered AISI 4130 medium carbon steel. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2021, 72, 1808-1812.	1.5	7
169	Dependency of Deformation Behavior of Retained Austenite in TRIP Steels on Microstructural and Chemical Homogeneity. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015, 28, 1272-1277.	2.9	6
170	A comprehensive approach for quantitative characterization and modeling of composite microstructures. <i>Applied Mathematical Modelling</i> , 2016, 40, 8826-8831.	4.2	6
171	Toward Unraveling the Importance of Deformed Microstructure before TRIP Heat Treatment in Transformation-Induced Plasticity Steels. <i>Steel Research International</i> , 2017, 88, 1600275.	1.8	6
172	Microstructure tailoring for property improvements of DP steel via cyclic intercritical annealing. <i>Materials Research Express</i> , 2019, 6, 126513.	1.6	6
173	Tempering of Cold-Rolled Martensite in Mild Steel and Elucidating the Effects of Alloying Elements. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 858-865.	2.5	6
174	A dislocation assisted self-consistent constitutive model for the high-temperature deformation of particulate metal-matrix composite. <i>Philosophical Magazine</i> , 2021, 101, 276-305.	1.6	6
175	Synergistic effects of alloying, homogenization, and hot extrusion on the mechanical properties of as-cast Mg-Al-Ca magnesium alloys. <i>Archives of Civil and Mechanical Engineering</i> , 2021, 21, 1.	3.8	6
176	Constitutive description of severely deformed metals based on dimensional analysis. <i>Materials Science and Technology</i> , 2014, 30, 719-724.	1.6	5
177	Improved properties of dual-phase steel via pre-intercritical annealing treatment and thermal cycling. <i>Materials Science and Technology</i> , 2020, 36, 1663-1670.	1.6	5
178	Microstructures and mechanical performance of Mg-4Si-6Ni in situ composite after extrusion process. <i>Materials Science and Technology</i> , 2022, 38, 169-180.	1.6	5
179	Tailoring the tensile properties of AZ91 magnesium alloy via grain refinement. <i>Materials Science and Technology</i> , 2022, 38, 1434-1438.	1.6	5
180	Evaluation of cast-on-strap joints in lead-acid batteries. <i>Materials Characterization</i> , 2009, 60, 1555-1560.	4.4	4

#	ARTICLE	IF	CITATIONS
181	Physically-based constitutive modeling of NiTi intermetallic compound during hot deformation. Canadian Metallurgical Quarterly, 2016, 55, 387-390.	1.2	4
182	Numerical and analytical solutions for determination of interdiffusion coefficients in superalloys during homogenization. Materials Today Communications, 2019, 21, 100631.	1.9	4
183	Mechanical response of a metastable austenitic stainless steel under different deformation modes. Materials Science and Technology, 2021, 37, 103-109.	1.6	4
184	Enhanced mechanical properties of Mg-Ni-RE alloys via hot extrusion. Materials Science and Technology, 2021, 37, 1285-1290.	1.6	4
185	Effect of Variation of Martensite with a Constant Carbon Content on Mechanical Behavior and Sliding Wear of Dual Phase Steels. Tribology Letters, 2022, 70, .	2.6	4
186	Modeling the compressive strength of cement mortar nano-composites. Computers and Concrete, 2012, 10, 49-57.	0.7	3
187	Semi-Solid Casting of Al-7wt%Si Alloy in Expendable Molds. Solid State Phenomena, 2006, 116-117, 497-500.	0.3	2
188	Crystal Plasticity Analysis of Texture Evolution of Pure Aluminum During Processing by a New Severe Plastic Deformation Technique. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 941-948.	2.2	2
189	Dependency of Natural Aging on the Ferrite Grain Size in Dual-Phase Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4961-4964.	2.2	2
190	Mechanical alloying and consolidation of copper-iron-silicon carbide nanocomposites. Materialwissenschaft Und Werkstofftechnik, 2020, 51, 1700-1704.	0.9	2
191	Two-step annealing treatment for grain refinement of cold-worked AISI 316L stainless steel. International Journal of Materials Research, 2020, 111, 676-680.	0.3	2
192	Microstructure, mechanical properties, and pitting corrosion resistance of SAF 2205 duplex stainless steel after friction hydro-pillar processing. International Journal of Advanced Manufacturing Technology, 2022, 120, 2047-2054.	3.0	2
193	Grain growth in nanocrystalline iron and Fe-Al alloys. Metals and Materials International, 2010, 16, 83-86.	3.4	1
194	Prediction of Temperatures of Austenite Equilibrium Transformations in Steels During Thermomechanical Processing. Journal of Materials Engineering and Performance, 2014, 23, 3710-3717.	2.5	1
195	Mathematical modeling of energy transfer to sheet surface layers and optimization of roll bonding strength. International Journal of Materials Research, 2015, 106, 1250-1257.	0.3	1
196	Controlling the mechanical properties of carbon steel by thermomechanical treatment. AIP Conference Proceedings, 2018, , .	0.4	1
197	Semi-Solid Casting of Al-7wt%Si Alloy in Expendable Molds. Solid State Phenomena, 0, , 497-500.	0.3	1
198	The effects of primary thermo-mechanical processing routes and intercritical annealing on the mechanical properties of st37 low carbon steel. Metallic Materials, 2018, 56, 297-303.	0.3	1

#	ARTICLE	IF	CITATIONS
199	Microstructure and Mechanical Properties of Dual-Phase Steels by Combining Adjusted Initial Microstructures and Severe Plastic Deformation. Steel Research International, 2022, 93, 2100596.	1.8	1