# Hamed Mirzadeh

List of Publications by Year
in descending order



| 199 | 7,892 | 31902 | 66788 |
|---|---|---|---|
| papers | citations | 53 h-index | 78 g-index |

| 200 | 200 | 200 | 3112 |
|---|---|---|---|
| all docs | docs citations | times ranked | 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. | 2.6 | 307 |
| 2 | Constitutive relationships for hot deformation of austenite. Acta Materialia, 2011, 59, 6441-6448. | 3.8 | 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. | 2.6 | 229 |
| 4 | Prediction of the critical conditions for initiation of dynamic recrystallization. Materials & Design, 2010, 31, 1174-1179. | 5.1 | 219 |
| 5 | EBSD study of a hot deformed austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 538, 236-245. | 2.6 | 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. | 2.6 | 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. | 2.8 | 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. | 2.6 | 127 |
| 9 | Deformation-induced martensite in austenitic stainless steels: A review. Archives of Civil and Mechanical Engineering, 2020, 20, 1. | 1.9 | 127 |
| 10 | Constitutive analysis of Mgâ€“Alâ€“Zn magnesium alloys during hot deformation. Mechanics of Materials, 2014, 77, 80-85. | 1.7 | 122 |
| 11 | Flow Curve Analysis of 17-4ÂPH Stainless Steel under Hot Compression Test. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 2950-2958. | 1.1 | 121 |
| 12 | Aging kinetics of 17-4 PH stainless steel. Materials Chemistry and Physics, 2009, 116, 119-124. | 2.0 | 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. | 1.9 | 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. | 2.6 | 105 |
| 15 | Effects of Grain Size on Mechanical Properties and Workâ€Hardening Behavior of AISI 304 Austenitic Stainless Steel. Steel Research International, 2019, 90, 1900153. | 1.0 | 101 |
| 16 | Rate controlling mechanisms during hot deformation of Mgâ€“3Gdâ€“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 Mgâ€“Gdâ€“Alâ€“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. | 2.6 | 96 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Thermal Mechanisms of Grain Refinement in Steels: A Review. Metals and Materials International, 2021, 27, 2078. | 1.8 | 96 |
| 20 | Modeling and Prediction of Hot Deformation Flow Curves. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 108-123. | 1.1 | 95 |
| 21 | Constitutive modeling and prediction of hot deformation flow stress under dynamic recrystallization conditions. Mechanics of Materials, 2015, 85, 66-79. | 1.7 | 94 |
| 22 | Solidification behavior and Laves phase dissolution during homogenization heat treatment of Inconel 718 superalloy. Vacuum, 2018, 154, 235-243. | 1.6 | 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. | 1.1 | 89 |
| 24 | Additive manufacturing â€“ A review of hot deformation behavior and constitutive modeling of flow stress. Current Opinion in Solid State and Materials Science, 2022, 26, 100992. | 5.6 | 88 |
| 25 | Tailoring the mechanical properties of Mgâ€“Zn magnesium alloy by calcium addition and hot extrusion process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138929. | 2.6 | 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. | 2.6 | 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. | 2.6 | 80 |
| 28 | Flow stress prediction at hot working conditions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1160-1164. | 2.6 | 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. | 2.6 | 77 |
| 30 | Correlation between processing parameters and strain-induced martensitic transformation in cold worked AISI 301 stainless steel. Materials Characterization, 2008, 59, 1650-1654. | 1.9 | 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. | 1.1 | 73 |
| 32 | Hot Deformation and Dynamic Recrystallization of 17-4 PH Stainless Steel. ISIJ International, 2013, 53, 680-689. | 0.6 | 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. | 2.8 | 72 |
| 34 | Hot deformation and dynamic recrystallization of NiTi intermetallic compound. Journal of Alloys and Compounds, 2014, 614, 56-59. | 2.8 | 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. | 1.1 | 70 |
| 36 | Enhanced Ductility of a Fineâ€Grained Mgâ€“Gdâ€“Alâ€“Zn Magnesium Alloy by Hot Extrusion. Advanced Engineering Materials, 2018, 20, 1701171. | 1.6 | 70 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Microstructural Evolutions During Reversion Annealing of Cold-Rolled AISI 316 Austenitic Stainless Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 2248-2256. | 1.1 | 68 |
| 38 | A simple Zerilliâ€“Armstrong constitutive equation for modeling and prediction of hot deformation flow stress of steels. Mechanics of Materials, 2016, 94, 38-45. | 1.7 | 67 |
| 39 | Fine tuning the mechanical properties of dual phase steel via thermomechanical processing of cold rolling and intercritical annealing. Materials Chemistry and Physics, 2019, 230, 1-8. | 2.0 | 66 |
| 40 | Mechanical properties of a hot deformed Al-Mg2Si in-situ composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 726, 10-17. | 2.6 | 65 |
| 41 | Micro-mechanisms and precipitation kinetics of delta (Î´) phase in Inconel 718 superalloy during aging. Journal of Alloys and Compounds, 2019, 795, 207-212. | 2.8 | 65 |
| 42 | Heterostructured stainless steel: Properties, current trends, and future perspectives. Materials Science and Engineering Reports, 2022, 150, 100691. | 14.8 | 65 |
| 43 | The rate of dynamic recrystallization in 17-4 PH stainless steel. Materials & Design, 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 Mgâ€“2Al magnesium alloy. Vacuum, 2019, 167, 214-222. | 1.6 | 62 |
| 45 | Constitutive behaviors of magnesium and Mgâ€“Znâ€“Zr alloy during hot deformation. Materials Chemistry and Physics, 2015, 152, 123-126. | 2.0 | 61 |
| 46 | Constitutive Description of 7075 Aluminum Alloy During Hot Deformation by Apparent and Physically-Based Approaches. Journal of Materials Engineering and Performance, 2015, 24, 1095-1099. | 1.2 | 61 |
| 47 | Quantification of the strengthening effect of rare earth elements during hot deformation of Mg-Gd-Y-Zr magnesium alloy. Journal of Materials Research and Technology, 2016, 5, 1-4. | 2.6 | 60 |
| 48 | Enhanced mechanical properties of as-cast AZ91 magnesium alloy by combined RE-Sr addition and hot extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 792, 139817. | 2.6 | 60 |
| 49 | Elucidating the effect of intermetallic compounds on the behavior of Mgâ€“Gdâ€“Alâ€“Zn magnesium alloys at elevated temperatures. Journal of Materials Research, 2017, 32, 4186-4195. | 1.2 | 59 |
| 50 | A comparative study on the hot flow stress of Mgâ€“Alâ€“Zn magnesium alloys using a simple physically-based approach. Journal of Magnesium and Alloys, 2014, 2, 225-229. | 5.5 | 58 |
| 51 | Modeling the kinetics of deformation-induced martensitic transformation in AISI 316 metastable austenitic stainless steel. Vacuum, 2018, 157, 243-248. | 1.6 | 58 |
| 52 | Recent advances in the kinetics of normal/abnormal grain growth: a review. Archives of Civil and Mechanical Engineering, 2021, 21, 1. | 1.9 | 58 |
| 53 | The Effects of Grain Refinement and Rare Earth Intermetallics on Mechanical Properties of As-Cast and Wrought Magnesium Alloys. Journal of Materials Engineering and Performance, 2018, 27, 1327-1333. | 1.2 | 57 |
| 54 | Quantification of the strengthening effect of reinforcements during hot deformation of aluminum-based composites. Materials & Design, 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. | 1.8 | 56 |
| 56 | Fine-grained dual phase steel via intercritical annealing of cold-rolled martensite. Vacuum, 2018, 155, 147-152. | 1.6 | 56 |
| 57 | Hot deformation behavior and flow stress modeling of Tiâ€“6Alâ€“4V alloy produced via electron beam melting additive manufacturing technology in single Î²-phase field. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 792, 139822. | 2.6 | 55 |
| 58 | Hot compression behavior of GZ31 magnesium alloy. Journal of Alloys and Compounds, 2015, 631, 1-6. | 2.8 | 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. | 1.7 | 54 |
| 60 | Extrapolation of flow curves at hot working conditions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1856-1860. | 2.6 | 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. | 1.2 | 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. | 2.6 | 51 |
| 63 | Abnormal grain growth in AISI 304L stainless steel. Materials Characterization, 2014, 97, 11-17. | 1.9 | 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. | 2.6 | 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. | 2.8 | 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. | 1.1 | 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. | 1.9 | 44 |
| 68 | Processing of Cu-Fe and Cu-Fe-SiC nanocomposites by mechanical alloying. Advanced Powder Technology, 2017, 28, 1882-1887. | 2.0 | 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. | 1.1 | 42 |
| 70 | Enhancement of the microstructure and elevated temperature mechanical properties of as-cast Mgâ€‘Al2Caâ€‘Mg2Ca in-situ composite by hot extrusion. Materials Characterization, 2019, 147, 155-164. | 1.9 | 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. | 2.6 | 39 |
| 72 | Effect of grain size on the corrosion resistance of low carbon steel. Materials Research Express, 2020, 7, 016522. | 0.8 | 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. | 2.6 | 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. | 1.0 | 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. | 2.8 | 35 |
| 76 | Homogenization kinetics of a typical nickel-based superalloy. Journal of Alloys and Compounds, 2019, 793, 277-282. | 2.8 | 35 |
| 77 | Optimization of turning process using artificial intelligence technology. International Journal of Advanced Manufacturing Technology, 2014, 70, 1205-1217. | 1.5 | 33 |
| 78 | Microstructural evolution and grain growth kinetics of GZ31 magnesium alloy. Materials Characterization, 2016, 118, 584-592. | 1.9 | 33 |
| 79 | Tailoring the Microstructure and Mechanical Properties of Dual Phase Steel Based on the Initial Microstructure. Steel Research International, 2017, 88, 1600385. | 1.0 | 33 |
| 80 | Enhanced mechanical properties of dual-phase steel by repetitive intercritical annealing. Canadian Metallurgical Quarterly, 2017, 56, 459-463. | 0.4 | 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. | 1.8 | 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. | 2.6 | 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. | 1.2 | 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. | 1.0 | 28 |
| 86 | Enhanced mechanical properties of as-cast Mg-Al-Ca magnesium alloys by friction stir processing. Materials Letters, 2021, 296, 129880. | 1.3 | 28 |
| 87 | A new intermetallic phase formation in Mg Si Ni magnesium-based in-situ formed alloys. Vacuum, 2019, 164, 349-354. | 1.6 | 27 |
| 88 | Interdiffusion coefficients of alloying elements in a typical Ni-based superalloy. Vacuum, 2019, 169, 108875. | 1.6 | 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. | 2.6 | 26 |
| 90 | Enhanced Mechanical Properties of Microalloyed Austenitic Stainless Steel Produced by Martensite Treatment. Advanced Engineering Materials, 2015, 17, 1226-1233. | 1.6 | 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. Materials Chemistry and Physics, 2019, 232, 305-310. | 2.0 | 25 |
| 92 | Revisiting the Diffusion of Niobium in an As-Cast Nickel-Based Superalloy During Annealing at Elevated Temperatures. Metals and Materials International, 2020, 26, 326-332. | 1.8 | 25 |
| 93 | Fluidity of Alâ€“Si semisolid slurries during rheocasting by a novel process. Journal of Materials Processing Technology, 2009, 209, 4977-4982. | 3.1 | 24 |
| 94 | The effect of primary thermo-mechanical treatment on TRIP steel microstructure and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 639, 402-406. | 2.6 | 24 |
| 95 | Constitutive modeling of flow stress during hot deformation of Snâ€“Alâ€“Znâ€“Cuâ€“Mg multi-principal-element alloy. Vacuum, 2019, 170, 108970. | 1.6 | 24 |
| 96 | Improved mechanical properties of mild steel via combination of deformation, intercritical annealing, and quench aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 756, 268-271. | 2.6 | 24 |
| 97 | Processing Route Effects on the Mechanical and Corrosion Properties of Dual Phase Steel. Metals and Materials International, 2020, 26, 882-890. | 1.8 | 24 |
| 98 | Superplasticity of high-entropy alloys: a review. Archives of Civil and Mechanical Engineering, 2022, 22, 1. | 1.9 | 24 |
| 99 | Prevention of surface hot shortness, development of banded structure, and mechanical properties of hot rolled Cu-bearing steel. Engineering Failure Analysis, 2016, 68, 132-137. | 1.8 | 23 |
| 100 | Precipitation kinetics of Î³â€³ phase and its mechanism in a Nb-bearing nickel-based superalloy during aging. Vacuum, 2020, 178, 109456. | 1.6 | 23 |
| 101 | Development of dynamic recrystallization maps based on the initial grain size. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 565, 90-95. | 2.6 | 22 |
| 102 | Unraveling the Effect of Deformation Temperature on the Mechanical Behavior and Transformationâ€Induced Plasticity of the SUS304L Stainless Steel. Steel Research International, 2020, 91, 2000114. | 1.0 | 22 |
| 103 | Dynamic recrystallization kinetics in Mg-3Gd-1Zn magnesium alloy during hot deformation. International Journal of Materials Research, 2016, 107, 277-279. | 0.1 | 21 |
| 104 | A Simple Constitutive Model for Prediction of Single-Peak Flow Curves Under Hot Working Conditions. Journal of Engineering Materials and Technology, Transactions of the ASME, 2016, 138, . | 0.8 | 20 |
| 105 | Aging kinetics and mechanical properties of copper-bearing low-carbon HSLA-100 microalloyed steel. Archives of Civil and Mechanical Engineering, 2019, 19, 1409-1418. | 1.9 | 20 |
| 106 | Processing of fine grained AISI 304L austenitic stainless steel by cold rolling and high-temperature short-term annealing. Materials Research Express, 2018, 5, 056529. | 0.8 | 19 |
| 107 | Effects of tempering on the mechanical and corrosion properties of dual phase steel. Materials Today Communications, 2020, 22, 100745. | 0.9 | 19 |
| 108 | Amorphization, mechano-crystallization, and crystallization kinetics of mechanically alloyed AlFeCuZnTi high-entropy alloys. Materials Letters, 2022, 307, 131098. | 1.3 | 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. | 2.8 | 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. | 2.6 | 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. | 0.8 | 18 |
| 112 | Molecular dynamics simulation of stress field around edge dislocations in Aluminum. Computational Materials Science, 2014, 84, 83-96. | 1.4 | 17 |
| 113 | Microstructural investigation of Al-Mg/B4C composite deformed at elevated temperature. Journal of Alloys and Compounds, 2018, 763, 643-651. | 2.8 | 17 |
| 114 | Effect of Gd on Dynamic Recrystallization Behavior of Magnesium During Hot Compression. Metals and Materials International, 2021, 27, 843-850. | 1.8 | 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. | 0.9 | 16 |
| 117 | Unexpected formation of delta (Î´) phase in as-cast niobium-bearing superalloy at solution annealing temperatures. Materials Letters, 2020, 261, 127008. | 1.3 | 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. | 2.6 | 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. | 2.8 | 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. | 2.6 | 15 |
| 121 | Effects of rheocasting parameters on the microstructure of rheo-centrifuged cast Alâ€“7.1wt%Si alloy. Journal of Alloys and Compounds, 2009, 474, 257-263. | 2.8 | 14 |
| 122 | Grain refinement and enhanced mechanical properties of ZK20 magnesium alloy via hot extrusion and mischmetal addition. Materials Research Express, 2019, 6, 116522. | 0.8 | 14 |
| 123 | Amorphization and mechano-crystallization of high-energy ball milled Fe Ti alloys. Journal of Non-Crystalline Solids, 2019, 520, 119466. | 1.5 | 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. | 1.2 | 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. | 2.6 | 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. | 2.0 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Unraveling the Effect of Homogenization Treatment on Decomposition of Austenite and Mechanical Properties of Lowâ€Alloyed TRIP Steel. Steel Research International, 2016, 87, 820-823. | 1.0 | 13 |
| 128 | Ferrite recrystallisation and intercritical annealing of cold-rolled low alloy medium carbon steel. Materials Science and Technology, 2019, 35, 1932-1941. | 0.8 | 13 |
| 129 | Unraveling the Effect of Martensite Volume Fraction on the Mechanical and Corrosion Properties of Lowâ€Carbon Dualâ€Phase Steel. Steel Research International, 2020, 91, 1900327. | 1.0 | 13 |
| 130 | Hot deformation behaviour of precipitation hardening stainless steel. Materials Science and Technology, 2010, 26, 501-504. | 0.8 | 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. | 1.1 | 12 |
| 132 | Enhancement of workâ€hardening behavior of dual phase steel by heat treatment. Materialwissenschaft Und Werkstofftechnik, 2018, 49, 1081-1086. | 0.5 | 12 |
| 133 | Revealing the As-Cast and Homogenized Microstructures of Niobium-Bearing Nickel-Based Superalloy. International Journal of Metalcasting, 2019, 13, 320-330. | 1.5 | 12 |
| 134 | Thermodynamics basis of saturation of martensite content during reversion annealing of cold rolled metastable austenitic steel. Vacuum, 2020, 174, 109220. | 1.6 | 12 |
| 135 | Processing, microstructure adjustments, and mechanical properties of dual phase steels: A review. Materials Science and Technology, 2021, 37, 561-591. | 0.8 | 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. | 1.9 | 12 |
| 137 | Superplasticity of bulk metallic glasses (BMGs): A review. Journal of Non-Crystalline Solids, 2022, 583, 121503. | 1.5 | 12 |
| 138 | Ball milling criteria for producing nano intermetallic compounds. Materials Science and Technology, 2010, 26, 281-284. | 0.8 | 11 |
| 139 | Deformation of Pure Aluminum Along the Groove Path of ECAPâ€Conform Process. Advanced Engineering Materials, 2016, 18, 319-323. | 1.6 | 11 |
| 140 | Evaluating the Effect of Hotâ€Rolling Reduction on the Mechanical Properties of In Situ Formed Aluminumâ€“Magnesiumâ€“Silicon (Alâ€Mg<sub>2</sub>Si) Composites. Advanced Engineering Materials, 2019, 21, 1900609. | 1.6 | 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. | 1.8 | 11 |
| 142 | Spheroidization heat treatment and intercritical annealing of low carbon steel. Journal of Mining and Metallurgy, Section B: Metallurgy, 2019, 55, 405-411. | 0.3 | 11 |
| 143 | Tailoring the mechanical properties of hypereutectic in situ Alâ€“Mg2Si composites via hybrid TiB2 reinforcement and hot extrusion. Archives of Civil and Mechanical Engineering, 2022, 22, 1. | 1.9 | 11 |
| 144 | Mechanical properties and fracture behavior of intercritically annealed AISI 4130 chromoly steel. Materials Research Express, 2018, 5, 066548. | 0.8 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Phase transformation mechanism and kinetics during step quenching of st37 low carbon steel. Materials Research Express, 2019, 6, 1165f2. | 0.8 | 10 |
| 146 | Crystallization kinetics of mechanically alloyed amorphous Fe-Ti alloys during annealing. Advanced Powder Technology, 2020, 31, 3215-3221. | 2.0 | 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. | 1.9 | 10 |
| 148 | Finite element analysis of plastic deformation in shear punch test. Materials Letters, 2021, 284, 128953. | 1.3 | 10 |
| 149 | Tempering of deformed and as-quenched martensite in structural steel. Journal of Mining and Metallurgy, Section B: Metallurgy, 2019, 55, 95-99. | 0.3 | 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. | 1.2 | 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. | 1.2 | 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. | 1.9 | 9 |
| 153 | Elucidating the effects of microsegregation on the precipitation phenomena in as-cast Nb-bearing superalloy. Materials Letters, 2020, 266, 127481. | 1.3 | 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. | 1.1 | 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. | 1.0 | 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. | 1.2 | 8 |
| 157 | Detailed Hallâ€“Petch Analysis of Cold Rolled and Annealed Duplex 2205 Stainless Steel. Steel Research International, 2022, 93, . | 1.0 | 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. | 2.6 | 8 |
| 159 | Cold unidirectional/cross-rolling of austenitic stainless steels: a review. Archives of Civil and Mechanical Engineering, 2022, 22, . | 1.9 | 8 |
| 160 | Enhanced mechanical properties of as-cast rare earth bearing magnesium alloy via elevated-temperature homogenization. Materials Today Communications, 2022, 31, 103821. | 0.9 | 8 |
| 161 | Multiâ€Axial Incremental Forging and Shearing as a New Severe Plastic Deformation Processing Technique. Advanced Engineering Materials, 2015, 17, 1197-1207. | 1.6 | 7 |
| 162 | Physically based constitutive description of OFHC copper at hot working conditions. Metallic Materials, 2016, 53, 105-111. | 0.2 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Texture development during hot deformation of Al/Mg alloy reinforced with ceramic particles. Journal of Alloys and Compounds, 2019, 798, 267-272. | 2.8 | 7 |
| 164 | Static recrystallization kinetics of ferrite in cold-deformed medium carbon steel. Materials Research Express, 2019, 6, 1265g9. | 0.8 | 7 |
| 165 | Estimation of homogenisation time for superalloys based on a new diffusional model. Materials Science and Technology, 2020, 36, 380-384. | 0.8 | 7 |
| 166 | Effects of hot rolling and homogenisation treatment on low alloy steel ingot. Materials Science and Technology, 2020, 36, 835-842. | 0.8 | 7 |
| 167 | Delta processing effects on the creep behavior of a typical Nb-bearing nickel-based superalloy. Vacuum, 2021, 184, 109913. | 1.6 | 7 |
| 168 | Tempering kinetics and corrosion resistance of quenched and tempered AISI 4130 medium carbon steel. Materials and Corrosion - Werkstoffe Und Korrosion, 2021, 72, 1808-1812. | 0.8 | 7 |
| 169 | Dependency of Deformation Behavior of Retained Austenite in TRIP Steels on Microstructural and Chemical Homogeneity. Acta Metallurgica Sinica (English Letters), 2015, 28, 1272-1277. | 1.5 | 6 |
| 170 | A comprehensive approach for quantitative characterization and modeling of composite microstructures. Applied Mathematical Modelling, 2016, 40, 8826-8831. | 2.2 | 6 |
| 171 | Toward Unraveling the Importance of Deformed Microstructure before TRIP Heat Treatment in Transformation-Induced Plasticity Steels. Steel Research International, 2017, 88, 1600275. | 1.0 | 6 |
| 172 | Microstructure tailoring for property improvements of DP steel via cyclic intercritical annealing. Materials Research Express, 2019, 6, 126513. | 0.8 | 6 |
| 173 | Tempering of Cold-Rolled Martensite in Mild Steel and Elucidating the Effects of Alloying Elements. Journal of Materials Engineering and Performance, 2020, 29, 858-865. | 1.2 | 6 |
| 174 | A dislocation assisted self-consistent constitutive model for the high-temperature deformation of particulate metal-matrix composite. Philosophical Magazine, 2021, 101, 276-305. | 0.7 | 6 |
| 175 | Synergistic effects of alloying, homogenization, and hot extrusion on the mechanical properties of as-cast Mgâ€“Alâ€“Ca magnesium alloys. Archives of Civil and Mechanical Engineering, 2021, 21, 1. | 1.9 | 6 |
| 176 | Constitutive description of severely deformed metals based on dimensional analysis. Materials Science and Technology, 2014, 30, 719-724. | 0.8 | 5 |
| 177 | Improved properties of dual-phase steel via pre-intercritical annealing treatment and thermal cycling. Materials Science and Technology, 2020, 36, 1663-1670. | 0.8 | 5 |
| 178 | Microstructures and mechanical performance of Mgâ€“4Siâ€“6Niâ€“xY in situ composite after extrusion process. Materials Science and Technology, 2022, 38, 169-180. | 0.8 | 5 |
| 179 | Tailoring the tensile properties of AZ91 magnesium alloy via grain refinement. Materials Science and Technology, 2022, 38, 1434-1438. | 0.8 | 5 |
| 180 | Evaluation of cast-on-strap joints in lead-acid batteries. Materials Characterization, 2009, 60, 1555-1560. | 1.9 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Physically-based constitutive modeling of NiTi intermetallic compound during hot deformation. Canadian Metallurgical Quarterly, 2016, 55, 387-390. | 0.4 | 4 |
| 182 | Numerical and analytical solutions for determination of interdiffusion coefficients in superalloys during homogenization. Materials Today Communications, 2019, 21, 100631. | 0.9 | 4 |
| 183 | Mechanical response of a metastable austenitic stainless steel under different deformation modes. Materials Science and Technology, 2021, 37, 103-109. | 0.8 | 4 |
| 184 | Enhanced mechanical properties of Mgâ€“Niâ€“xRE alloys via hot extrusion. Materials Science and Technology, 2021, 37, 1285-1290. | 0.8 | 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, . | 1.2 | 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. | 1.1 | 2 |
| 189 | Dependency of Natural Aging on the Ferritfoe Grain Size in Dual-Phase Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4961-4964. | 1.1 | 2 |
| 190 | Mechanical alloying and consolidation of copperâ€ironâ€silicon carbide nanocomposites. Materialwissenschaft Und Werkstofftechnik, 2020, 51, 1700-1704. | 0.5 | 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. | 0.1 | 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. | 1.5 | 2 |
| 193 | Grain growth in nanocrystalline iron and Fe-Al alloys. Metals and Materials International, 2010, 16, 83-86. | 1.8 | 1 |
| 194 | Prediction of Temperatures of Austenite Equilibrium Transformations in Steels During Thermomechanical Processing. Journal of Materials Engineering and Performance, 2014, 23, 3710-3717. | 1.2 | 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. | 0.1 | 1 |
| 196 | Controlling the mechanical properties of carbon steel by thermomechanical treatment. AIP Conference Proceedings, 2018, , . | 0.3 | 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. | 0.2 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Microstructure and Mechanical Properties of Dualâ€Phase Steels by Combining Adjusted Initial Microstructures and Severe Plastic Deformation. Steel Research International, 2022, 93, 2100596. | 1.0 | 1 |