

Dislocation and twin substructure evolution during strain hardening of
Mn-0.6wt.% C TWIP steel observed by electron channeling contrast

Acta Materialia

59, 6449-6462

DOI: [10.1016/j.actamat.2011.07.009](https://doi.org/10.1016/j.actamat.2011.07.009)

Citation Report

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Work hardening and uniform elongation of an ultrafine-grained Fe-33Mn binary alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 530, 659-663. | 2.6 | 16 |
| 2 | New insights on quantitative microstructure characterization by electron channeling contrast imaging under controlled diffraction conditions in SEM. <i>Microscopy and Microanalysis</i> , 2012, 18, 686-687. | 0.2 | 3 |
| 3 | Multistage strain hardening through dislocation substructure and twinning in a high strength and ductile weight-reduced Fe-Mn-Al-C steel. <i>Acta Materialia</i> , 2012, 60, 5791-5802. | 3.8 | 409 |
| 4 | Elastic properties of face-centred cubic Fe-Mn-C studied by nanoindentation and ab initio calculations. <i>Acta Materialia</i> , 2012, 60, 6025-6032. | 3.8 | 43 |
| 5 | Effect of deformation temperature on tensile properties in a pre-cooled Fe-Mn-C austenitic steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 556, 331-336. | 2.6 | 12 |
| 6 | TWIP Effect and Plastic Instability Condition in an Fe-Mn-C Austenitic Steel. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2012, 98, 229-236. | 0.1 | 10 |
| 7 | SEM Investigation of High-Alloyed Austenitic Stainless Cast Steels With Varying Austenite Stability at Room Temperature and 100°C. <i>Steel Research International</i> , 2012, 83, 512-520. | 1.0 | 50 |
| 8 | Characterization and Prediction of Flow Behavior in High-Manganese Twinning Induced Plasticity Steels: Part I. Mechanism Maps and Work-Hardening Behavior. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 1688-1704. | 1.1 | 196 |
| 9 | Characterization and Prediction of Flow Behavior in High-Manganese Twinning Induced Plasticity Steels: Part II. Jerky Flow and Instantaneous Strain Rate. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 1705-1723. | 1.1 | 40 |
| 10 | Adiabatic temperature increase associated with deformation twinning and dislocation plasticity. <i>Acta Materialia</i> , 2012, 60, 3994-4004. | 3.8 | 39 |
| 11 | Strengthening an austenitic Fe-Mn steel using nanotwinned austenitic grains. <i>Acta Materialia</i> , 2012, 60, 4027-4040. | 3.8 | 141 |
| 12 | Dislocation density measurement by electron channeling contrast imaging in a scanning electron microscope. <i>Scripta Materialia</i> , 2012, 66, 343-346. | 2.6 | 81 |
| 13 | Some aspects of the cyclic behavior of twinning-induced plasticity steels. <i>Scripta Materialia</i> , 2012, 66, 1034-1039. | 2.6 | 33 |
| 14 | Hydrogen-induced cracking at grain and twin boundaries in an Fe-Mn-C austenitic steel. <i>Scripta Materialia</i> , 2012, 66, 459-462. | 2.6 | 168 |
| 15 | Microstructural evolution during plastic deformation of twinning-induced plasticity steels. <i>Scripta Materialia</i> , 2012, 66, 1002-1006. | 2.6 | 64 |
| 16 | Low stacking fault energy steels in the context of manganese-rich iron-based alloys. <i>Scripta Materialia</i> , 2012, 66, 1024-1029. | 2.6 | 45 |
| 17 | Grain size effect on strain hardening in twinning-induced plasticity steels. <i>Scripta Materialia</i> , 2012, 66, 992-996. | 2.6 | 232 |
| 18 | Hydrogen-induced delayed fracture of a Fe-22Mn-0.6C steel pre-strained at different strain rates. <i>Scripta Materialia</i> , 2012, 66, 947-950. | 2.6 | 50 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Estimating local dislocation content near a grain boundary in hot deformed AA 3104 aluminum alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 531, 178-181. | 2.6 | 8 |
| 20 | On the relationship between work hardening and twinning rate in TWIP steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 542, 8-14. | 2.6 | 155 |
| 21 | Coupling of Electron Channeling with EBSD: Toward the Quantitative Characterization of Deformation Structures in the SEM. <i>Jom</i> , 2013, 65, 1229-1236. | 0.9 | 110 |
| 22 | Deformation mechanisms of a 20Mn TWIP steel investigated by in situ neutron diffraction and TEM. <i>Acta Materialia</i> , 2013, 61, 6093-6106. | 3.8 | 87 |
| 23 | EBSD characterization of twinning in cold-rolled CP-Ti. <i>Materials Characterization</i> , 2013, 84, 41-47. | 1.9 | 29 |
| 24 | Application of a Dislocation Density-Based Constitutive Model to Al-Alloyed TWIP Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 4168-4182. | 1.1 | 71 |
| 25 | Formability of Fe-Mn-C Twinning Induced Plasticity Steel. <i>Journal of Iron and Steel Research International</i> , 2013, 20, 111-117. | 1.4 | 13 |
| 26 | Effects of intergranular carbide precipitation on delayed fracture behavior in three TWinning Induced Plasticity (TWIP) steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 587, 85-99. | 2.6 | 36 |
| 27 | Bulk combinatorial design of ductile martensitic stainless steels through confined martensite-to-austenite reversion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 582, 235-244. | 2.6 | 46 |
| 28 | Characterization of twin boundaries in an Fe-17.5Mn-0.56C twinning induced plasticity steel. <i>Materials Characterization</i> , 2013, 85, 100-110. | 1.9 | 8 |
| 29 | Nanomechanical characterization of the hydrogen effect on pulsed plasma nitrided super duplex stainless steel. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 15520-15531. | 3.8 | 23 |
| 30 | Hydrogen-assisted quasi-cleavage fracture in a single crystalline type 316 austenitic stainless steel. <i>Corrosion Science</i> , 2013, 75, 345-353. | 3.0 | 85 |
| 31 | Investigation of early stage deformation mechanisms in a metastable β^2 titanium alloy showing combined twinning-induced plasticity and transformation-induced plasticity effects. <i>Acta Materialia</i> , 2013, 61, 6406-6417. | 3.8 | 368 |
| 32 | Revealing the strain-hardening behavior of twinning-induced plasticity steels: Theory, simulations, experiments. <i>Acta Materialia</i> , 2013, 61, 494-510. | 3.8 | 429 |
| 33 | Influence of Al content and precipitation state on the mechanical behavior of austenitic high-Mn low-density steels. <i>Scripta Materialia</i> , 2013, 68, 343-347. | 2.6 | 274 |
| 34 | Three-dimensional investigation of grain boundary-twin interactions in a Mg AZ31 alloy by electron backscatter diffraction and continuum modeling. <i>Acta Materialia</i> , 2013, 61, 7679-7692. | 3.8 | 101 |
| 35 | Kinetics of deformation processes in high-alloyed cast transformation-induced plasticity/twinning-induced plasticity steels determined by acoustic emission and scanning electron microscopy: Influence of austenite stability on deformation mechanisms. <i>Acta Materialia</i> , 2013, 61, 2434-2449. | 3.8 | 91 |
| 36 | Grain refinement effect on cryogenic tensile ductility in a Fe-17Mn-0.5C twinning-induced plasticity steel. <i>Materials & Design</i> , 2013, 49, 234-241. | 5.1 | 61 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Understanding the detection of carbon in austenitic high-Mn steel using atom probe tomography. <i>Ultramicroscopy</i> , 2013, 132, 239-247. | 0.8 | 50 |
| 38 | Microstructure and texture evolution in a twinning-induced-plasticity steel during uniaxial tension. <i>Acta Materialia</i> , 2013, 61, 2671-2691. | 3.8 | 88 |
| 39 | The effects of Si on the mechanical twinning and strain hardening of Fe-18Mn-0.6C twinning-induced plasticity steel. <i>Acta Materialia</i> , 2013, 61, 3399-3410. | 3.8 | 218 |
| 40 | Microbanding mechanism in an Fe-Mn-C high-Mn twinning-induced plasticity steel. <i>Scripta Materialia</i> , 2013, 69, 53-56. | 2.6 | 74 |
| 41 | The influences of temperature and microstructure on the tensile properties of a CoCrFeMnNi high-entropy alloy. <i>Acta Materialia</i> , 2013, 61, 5743-5755. | 3.8 | 2,352 |
| 42 | Hydrogen-assisted failure in a twinning-induced plasticity steel studied under in situ hydrogen charging by electron channeling contrast imaging. <i>Acta Materialia</i> , 2013, 61, 4607-4618. | 3.8 | 218 |
| 43 | Abnormal room temperature serrated flow and strain rate dependence of critical strain of a Fe-Mn-C twin-induced plasticity steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 561, 266-269. | 2.6 | 39 |
| 44 | Critique of mechanisms of formation of deformation, annealing and growth twins: Face-centered cubic metals and alloys. <i>Scripta Materialia</i> , 2013, 68, 95-99. | 2.6 | 204 |
| 45 | Influence of stress, temperature, and strain on calcite twins constrained by deformation experiments. <i>Tectonophysics</i> , 2013, 601, 20-36. | 0.9 | 63 |
| 46 | Microstructure and tensile behaviour of 15-24 wt-Mn TWIP steels. <i>Materials Science and Technology</i> , 2013, 29, 1048-1054. | 0.8 | 12 |
| 47 | Multi-Scale Correlative Microscopy Investigation of Both Structure and Chemistry of Deformation Twin Bundles in Fe-Mn-C Steel. <i>Microscopy and Microanalysis</i> , 2013, 19, 1581-1585. | 0.2 | 14 |
| 48 | Electron Channeling Contrast Imaging of Plastic Deformation Induced by Indentation in Polycrystalline Nickel. <i>Microscopy and Microanalysis</i> , 2013, 19, 1620-1631. | 0.2 | 8 |
| 49 | Microstructure Analysis of High-Manganese TWIP Steels Produced via Strip Casting. <i>Key Engineering Materials</i> , 0, 554-557, 553-561. | 0.4 | 11 |
| 50 | Performance and Characterization of TWIP Steels for Automotive Applications. <i>Materials Performance and Characterization</i> , 2013, 2, 20130009. | 0.2 | 17 |
| 51 | Deformation Microstructures of Austenitic Stainless Steels - Reduced Amount of Nickel and Molybdenum for Hydrogen Energy Systems. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2013, 77, 593-598. | 0.2 | 4 |
| 52 | TWIP Effect and Plastic Instability Condition in an Fe-Mn-C Austenitic Steel. <i>ISIJ International</i> , 2013, 53, 323-329. | 0.6 | 67 |
| 53 | Factors Affecting Static Strain Aging under Stress at Room Temperature in a Fe-Mn-C Twinning-induced Plasticity Steel. <i>ISIJ International</i> , 2013, 53, 1089-1096. | 0.6 | 9 |
| 54 | Effects of Static and Dynamic Strain Aging on Hydrogen Embrittlement in TWIP Steels Containing Al. <i>ISIJ International</i> , 2013, 53, 1268-1274. | 0.6 | 24 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Factors Affecting Static Strain Aging Under Stress at Room Temperature in a Fe-Mn-C Twinning-Induced Plasticity Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2014, 100, 1123-1131. | 0.1 | 2 |
| 56 | Alloy Design, Combinatorial Synthesis, and Microstructure-Property Relations for Low-Density Fe-Mn-Al-C Austenitic Steels. Jom, 2014, 66, 1845-1856. | 0.9 | 172 |
| 57 | Enhanced Strength and Ductility in an Ultrafine-Grained Fe-22Mn-0.6C Austenitic Steel Having Fully Recrystallized Structure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5300-5304. | 1.1 | 40 |
| 58 | Annealing Temperature Dependence of the Tensile Behavior of 10% Mn Multi-phase TWIP-TRIP Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 6039-6052. | 1.1 | 92 |
| 59 | Revealing the Strain-Hardening Mechanisms of Advanced High-Mn Steels by Multi-Scale Microstructure Characterization. Materials Science Forum, 0, 783-786, 755-760. | 0.3 | 1 |
| 60 | Effect of Cold Rolling on Microstructure and Mechanical Properties of a Fe-23Mn-0.3C-1.5Al TWIP Steel. Advanced Materials Research, 0, 922, 394-399. | 0.3 | 4 |
| 61 | Study of Dislocation Substructures in High-Mn Steels by Electron Channeling Contrast Imaging. Materials Science Forum, 0, 783-786, 750-754. | 0.3 | 0 |
| 62 | Notch ductility of steels for automotive components. Engineering Fracture Mechanics, 2014, 127, 181-193. | 2.0 | 18 |
| 63 | Microstructure Refinement of Cold-Sprayed Copper Investigated By Electron Channeling Contrast Imaging. Microscopy and Microanalysis, 2014, 20, 1499-1506. | 0.2 | 22 |
| 64 | Enhanced low-cycle fatigue life by pre-straining in an Fe-17Mn-0.8C twinning induced plasticity steel. Metals and Materials International, 2014, 20, 1043-1051. | 1.8 | 24 |
| 65 | The influence of manganese content on the stacking fault and austenite/martensite interfacial energies in Fe-Mn (Al-Si) steels investigated by experiment and theory. Acta Materialia, 2014, 68, 238-253. | 3.8 | 300 |
| 66 | Severe plastic deformation of a TWIP steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 593, 163-169. | 2.6 | 49 |
| 67 | Concurrent microstructural evolution of ferrite and austenite in a duplex stainless steel processed by high-pressure torsion. Acta Materialia, 2014, 63, 16-29. | 3.8 | 90 |
| 68 | Effect of Nb and Mo on the hot ductility behavior of a high-manganese austenitic Fe-21Mn-1.3Al-1.5Si-0.5C TWIP steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 616, 229-239. | 2.6 | 50 |
| 69 | Grain boundary segregation induced strengthening of an ultrafine-grained austenitic stainless steel. Materials Letters, 2014, 136, 349-352. | 1.3 | 118 |
| 70 | Strain Hardening Associated with Dislocation, Deformation Twinning, and Dynamic Strain Aging in Fe-20Mn-1.3C (3Cu) TWIP Steels. Acta Metallurgica Sinica (English Letters), 2014, 27, 601-608. | 1.5 | 13 |
| 71 | Impact of short-range ordering on yield strength of high manganese austenitic steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 614, 122-128. | 2.6 | 48 |
| 72 | Smaller is less stable: Size effects on twinning vs. transformation of reverted austenite in TRIP-maraging steels. Acta Materialia, 2014, 79, 268-281. | 3.8 | 225 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Microstructural Characterization of Mg ^{0.3} Al ^{0.2} Ca Alloy Using Ion Milling Surface Preparation Technique. <i>Metallography, Microstructure, and Analysis</i> , 2014, 3, 257-262. | 0.5 | 3 |
| 74 | Deformation mechanisms in an austenitic single-phase duplex microstructured steel with nanotwinned grains. <i>Acta Materialia</i> , 2014, 81, 487-500. | 3.8 | 92 |
| 75 | Recovery and Recrystallization: Phenomena, Physics, Models, Simulation. , 2014, , 2291-2397. | | 81 |
| 76 | Hydrogen embrittlement associated with strain localization in a precipitation-hardened Fe-Mn-Al-C light weight austenitic steel. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 4634-4646. | 3.8 | 170 |
| 77 | Strain hardening behavior of phase reversion-induced nanograined/ultrafine-grained (NG/UFG) austenitic stainless steel and relationship with grain size and deformation mechanism. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 613, 60-70. | 2.6 | 70 |
| 78 | Control of Strain Hardening Behavior in High-Mn Austenitic Steels. <i>Acta Metallurgica Sinica (English)</i> Tj ETQq1 1 0.784314 rgBT /Over 1.5 864 | 1.5 | 64 |
| 79 | Integrated experimental-simulation analysis of stress and strain partitioning in multiphase alloys. <i>Acta Materialia</i> , 2014, 81, 386-400. | 3.8 | 285 |
| 80 | High strength and ductile low density austenitic FeMnAlC steels: Simplex and alloys strengthened by nanoscale ordered carbides. <i>Materials Science and Technology</i> , 2014, 30, 1099-1104. | 0.8 | 117 |
| 81 | Temperature dependence of the mechanical properties of equiatomic solid solution alloys with face-centered cubic crystal structures. <i>Acta Materialia</i> , 2014, 81, 428-441. | 3.8 | 1,387 |
| 82 | Microstructure evolution and strengthening mechanisms of Fe-23Mn-0.3C-1.5Al TWIP steel during cold rolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 617, 52-60. | 2.6 | 112 |
| 83 | Effect of Carbon Content on Stacking Fault Energy of Fe-20Mn-3Cu TWIP Steel. <i>Journal of Iron and Steel Research International</i> , 2014, 21, 116-120. | 1.4 | 13 |
| 84 | Difference in transformation behavior between ferrite and austenite formations in medium manganese steel. <i>Acta Materialia</i> , 2014, 65, 251-258. | 3.8 | 150 |
| 85 | Effects of twin intersection on the tensile behavior in high nitrogen austenitic stainless steel. <i>Materials Characterization</i> , 2014, 91, 19-25. | 1.9 | 45 |
| 86 | Strain rate effects on tensile deformation behaviors for Fe-22Mn-0.6C-(1.5Al) twinning-induced plasticity steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 607, 551-558. | 2.6 | 78 |
| 87 | A novel, single phase, non-equiatomic FeMnNiCoCr high-entropy alloy with exceptional phase stability and tensile ductility. <i>Scripta Materialia</i> , 2014, 72-73, 5-8. | 2.6 | 534 |
| 88 | Strengthening of biomedical Ni-free Co-Cr-Mo alloy by multipass low-strain-per-pass thermomechanical processing. <i>Acta Biomaterialia</i> , 2015, 28, 215-224. | 4.1 | 23 |
| 89 | Importance of crack-propagation-induced μ -martensite in strain-controlled low-cycle fatigue of high-Mn austenitic steel. <i>Philosophical Magazine Letters</i> , 2015, 95, 303-311. | 0.5 | 25 |
| 90 | From High-Entropy Alloys to High-Entropy Steels. <i>Steel Research International</i> , 2015, 86, 1127-1138. | 1.0 | 158 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Significant contribution of stacking faults to the strain hardening behavior of Cu-15%Al alloy with different grain sizes. <i>Scientific Reports</i> , 2015, 5, 16707. | 1.6 | 127 |
| 92 | Investigate earing of TWIP steel sheet during deep-drawing process by using crystal plasticity constitutive model. <i>MATEC Web of Conferences</i> , 2015, 21, 12002. | 0.1 | 0 |
| 93 | Pre- ϵ -Blast Strengthening of Fe-18Mn-0.6C-1.5Al TWIP Steel. <i>Steel Research International</i> , 2015, 86, 760-765. | 1.0 | 1 |
| 94 | Post-Deformation Microstructure and Texture Characterization of Fe-18Mn-0.6C-1.5Al TWIP Steel. <i>Steel Research International</i> , 2015, 86, 1461-1468. | 1.0 | 3 |
| 95 | Mechanical properties and deformation behaviour of Fe-(20/27)Mn-4Al-0.3C austenitic steels. <i>MATEC Web of Conferences</i> , 2015, 21, 07011. | 0.1 | 1 |
| 96 | Characterization of Evolution of Microscopic Stress and Strain in High-Manganese Twinning-Induced Plasticity Steel. <i>ISIJ International</i> , 2015, 55, 2158-2165. | 0.6 | 7 |
| 97 | Microstructures and mechanical properties of compositionally complex Co-free FeNiMnCr18 FCC solid solution alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 640, 217-224. | 2.6 | 108 |
| 98 | Microstructure and Mechanical Properties of High Manganese TWIP Steel after Thermo-Forming Processes. <i>Solid State Phenomena</i> , 2015, 226, 99-102. | 0.3 | 0 |
| 99 | Critical Assessment 15: Science of deformation and failure mechanisms in twinning induced plasticity steels. <i>Materials Science and Technology</i> , 2015, 31, 1265-1270. | 0.8 | 18 |
| 100 | Twin-roll strip casting: A competitive alternative for the production of high-manganese steels with advanced mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 627, 72-81. | 2.6 | 53 |
| 101 | Grain boundary formation by remnant dislocations from the de-twinning of thin nano-twins. <i>Scripta Materialia</i> , 2015, 100, 98-101. | 2.6 | 58 |
| 102 | Suppression of dislocations at high strain rate deformation in a twinning-induced plasticity steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 628, 84-88. | 2.6 | 26 |
| 103 | Plastic deformation and damage induced by fatigue in TWIP steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 628, 410-418. | 2.6 | 20 |
| 104 | The effect of grain size on the twin initiation stress in a TWIP steel. <i>Acta Materialia</i> , 2015, 89, 247-257. | 3.8 | 221 |
| 105 | 3D structural and atomic-scale analysis of lath martensite: Effect of the transformation sequence. <i>Acta Materialia</i> , 2015, 95, 366-377. | 3.8 | 191 |
| 106 | Microstructural evolution and deformation behavior of twinning-induced plasticity (TWIP) steel during wire drawing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 644, 41-52. | 2.6 | 58 |
| 107 | Modeling the hot flow behavior of a Fe-22Mn-0.41C-1.6Al-1.4Si TWIP steel microalloyed with Ti, V and Nb. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 644, 374-385. | 2.6 | 24 |
| 108 | Analytical expressions of incompatibility stresses at ϵ -twin boundaries and consequences on single-slip promotion parallel to twin plane. <i>Philosophical Magazine</i> , 2015, 95, 12-31. | 0.7 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Case studies on the application of high-resolution electron channelling contrast imaging “ investigation of defects and defect arrangements in metallic materials. Philosophical Magazine, 2015, 95, 759-793. | 0.7 | 28 |
| 110 | Low-Energy Dislocation Structure (LEDS) character of dislocation boundaries aligned with slip planes in rolled aluminium. Philosophical Magazine, 2015, 95, 1471-1489. | 0.7 | 14 |
| 111 | Investigating and understanding the effects of multiple femtosecond laser scans on the surface topography of stainless steel 304 and titanium. Applied Surface Science, 2015, 353, 512-521. | 3.1 | 59 |
| 112 | Suppression of twinning and phase transformation in an ultrafine grained 2 GPa strong metastable austenitic steel: Experiment and simulation. Acta Materialia, 2015, 97, 305-315. | 3.8 | 79 |
| 113 | Temperature effect on deformation mechanisms and mechanical properties of a high manganese C+N alloyed austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 71-83. | 2.6 | 86 |
| 114 | Nano-twin mediated plasticity in carbon-containing FeNiCoCrMn high entropy alloys. Journal of Alloys and Compounds, 2015, 647, 815-822. | 2.8 | 281 |
| 115 | Tensile yield behavior of Fe“30Mn“3Al“3Si twinning-induced plasticity steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 638, 1-4. | 2.6 | 4 |
| 116 | On the micro-deformation mechanisms active in high-manganese austenitic steels under impact loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 632, 29-34. | 2.6 | 28 |
| 117 | Microstructural evolution of Cu“Al alloys subjected to multi-axial compression. Materials Characterization, 2015, 103, 107-119. | 1.9 | 26 |
| 118 | Effect of the heat-treatment temperature on the mechanical properties and microstructural evolution of cold-rolled twinning-induced plasticity steel. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 386-391. | 0.4 | 4 |
| 119 | A nanotwinned surface layer generated by high strain-rate deformation in a TRIP steel. Materials & Design, 2015, 80, 144-151. | 5.1 | 5 |
| 120 | Design of a twinning-induced plasticity high entropy alloy. Acta Materialia, 2015, 94, 124-133. | 3.8 | 618 |
| 121 | Influence of the Thermo-Mechanical Treatment on the Properties and Microstructure of High Manganese Austenitic-Ferritic Steel. Solid State Phenomena, 2015, 226, 75-78. | 0.3 | 1 |
| 122 | Microstructure and Mechanical Properties of Ti Cold-Spray Splats Determined by Electron Channeling Contrast Imaging and Nanoindentation Mapping. Microscopy and Microanalysis, 2015, 21, 570-581. | 0.2 | 38 |
| 123 | On the Mechanisms of Different Work-Hardening Stages in Twinning-Induced Plasticity Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 5080-5090. | 1.1 | 23 |
| 124 | Size and orientation effects in partial dislocation-mediated deformation of twinning-induced plasticity steel micro-pillars. Acta Materialia, 2015, 98, 391-404. | 3.8 | 95 |
| 125 | The influence of stacking fault energy on the microstructural and strain-hardening evolution of Fe“Mn“Al“Si steels during tensile deformation. Acta Materialia, 2015, 100, 178-190. | 3.8 | 359 |
| 126 | Non-equiatomic high entropy alloys: Approach towards rapid alloy screening and property-oriented design. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 648, 183-192. | 2.6 | 166 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Spatially and Kinetically Resolved Mapping of Hydrogen in a Twinning-Induced Plasticity Steel by Use of Scanning Kelvin Probe Force Microscopy. <i>Journal of the Electrochemical Society</i> , 2015, 162, C638-C647. | 1.3 | 64 |
| 128 | Twinning activities in high-Mn austenitic steels under high-velocity compressive loading. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 648, 104-112. | 2.6 | 28 |
| 129 | Recrystallization behavior of a high-manganese steel: Experiments and simulations. <i>Acta Materialia</i> , 2015, 100, 155-168. | 3.8 | 96 |
| 130 | Comparison of strength–ductility combinations between nanotwinned austenite and martensite–austenite stainless steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 647, 152-156. | 2.6 | 28 |
| 131 | Comparison of twinning evolution with work hardening ability in twinning-induced plasticity steel under different strain rates. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 622, 184-188. | 2.6 | 32 |
| 132 | Grain boundary segregation in Fe–Mn–C twinning-induced plasticity steels studied by correlative electron backscatter diffraction and atom probe tomography. <i>Acta Materialia</i> , 2015, 83, 37-47. | 3.8 | 85 |
| 133 | Combined Multi-scale Analyses on Strain/Damage/Microstructure in Steel: Example of Damage Evolution Associated with μ -martensitic Transformation. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2016, 102, 227-236. | 0.1 | 6 |
| 134 | Effects of Aluminum on Hydrogen Solubility and Diffusion in Deformed Fe-Mn Alloys. <i>Advances in Materials Science and Engineering</i> , 2016, 2016, 1-9. | 1.0 | 3 |
| 135 | Combined Multi-scale Analyses on Strain/Damage/Microstructure in Steel: Example of Damage Evolution Associated with μ -martensitic Transformation. <i>ISIJ International</i> , 2016, 56, 2037-2046. | 0.6 | 25 |
| 136 | Influence of pre-existing martensite on the wear resistance of metastable austenitic stainless steels. <i>Wear</i> , 2016, 364-365, 40-47. | 1.5 | 22 |
| 137 | Micro-scale measurements of plastic strain field, and local contributions of slip and twinning in TWIP steels during in situ tensile tests. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 672, 7-14. | 2.6 | 13 |
| 138 | On the mechanism of {332} twinning in metastable β^2 titanium alloys. <i>Acta Materialia</i> , 2016, 111, 173-186. | 3.8 | 191 |
| 139 | Experimental investigation on a novel medium Mn steel combining transformation-induced plasticity and twinning-induced plasticity effects. <i>International Journal of Plasticity</i> , 2016, 78, 173-186. | 4.1 | 125 |
| 140 | Microstructural evolution and mechanical properties of a novel FeCrNiBSi advanced high-strength steel: Slow, accelerated and fast casting cooling rates. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 668, 188-200. | 2.6 | 13 |
| 141 | <i>Ab initio</i> -guided design of twinning-induced plasticity steels. <i>MRS Bulletin</i> , 2016, 41, 320-325. | 1.7 | 25 |
| 142 | Revealing the deformation mechanisms of Cu–Al alloys with high strength and good ductility. <i>Acta Materialia</i> , 2016, 110, 61-72. | 3.8 | 111 |
| 143 | Microstructural evolution and phase transformation in twinning-induced plasticity steel induced by high-pressure torsion. <i>Acta Materialia</i> , 2016, 109, 300-313. | 3.8 | 58 |
| 144 | Mechanical properties and strain hardening behavior of phase reversion-induced nano/ultrafine Fe-17Cr-6Ni austenitic structure steel. <i>Journal of Alloys and Compounds</i> , 2016, 689, 718-725. | 2.8 | 31 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Effect of Boron Addition on Microstructural Evolution and Room-Temperature Mechanical Properties of Novel Fe66x CrNiB x Si (x=0, 0.25, 0.50 and 0.75 WtPct) Advanced High-Strength Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5423-5437. | 1.1 | 9 |
| 146 | Manganese: High Content in Steels. , 2016, , 2098-2113. | | 0 |
| 147 | Strain hardening model of TWIP steels with manganese content. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 674, 178-185. | 2.6 | 8 |
| 148 | A remarkable improvement of low-cycle fatigue resistance of high-Mn austenitic TWIP alloys with similar tensile properties: Importance of slip mode. Acta Materialia, 2016, 118, 196-212. | 3.8 | 78 |
| 149 | Enhancing the crashworthiness of high-manganese steel by strain-hardening engineering, and tailored folding by local heat-treatment. Materials and Design, 2016, 110, 157-168. | 3.3 | 37 |
| 150 | Microstructure evolution and critical stress for twinning in the CrMnFeCoNi high-entropy alloy. Acta Materialia, 2016, 118, 152-163. | 3.8 | 823 |
| 151 | Effect of Al Content in Low Carbon High Manganese TWIP Steel. Key Engineering Materials, 0, 706, 16-22. | 0.4 | 1 |
| 152 | The effect of interstitial carbon on the mechanical properties and dislocation substructure evolution in Fe40.4Ni11.3Mn34.8Al7.5Cr6 high entropy alloys. Acta Materialia, 2016, 120, 228-239. | 3.8 | 373 |
| 153 | Effect of strain rate on hydrogen embrittlement susceptibility of twinning-induced plasticity steel pre-charged with high-pressure hydrogen gas. International Journal of Hydrogen Energy, 2016, 41, 15362-15372. | 3.8 | 79 |
| 154 | On the conjoint influence of broaching and heat treatment on bending fatigue behavior of Inconel 718. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 671, 158-169. | 2.6 | 11 |
| 155 | Strain hardening by dynamic slip band refinement in a high-Mn lightweight steel. Acta Materialia, 2016, 116, 188-199. | 3.8 | 276 |
| 156 | Influence of Mn_3C -carbide interface structure on the formability of lightweight steels. Materials and Design, 2016, 104, 211-216. | 3.3 | 36 |
| 157 | On the work-hardening behaviour of a high manganese TWIP steel at different deformation temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 669, 437-446. | 2.6 | 53 |
| 158 | Deformation Mechanisms in Austenitic TRIP/TWIP Steel as a Function of Temperature. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 49-58. | 1.1 | 211 |
| 159 | Effect of intercritical deformation on microstructure and mechanical properties of a low-silicon aluminum-added hot-rolled directly quenched and partitioned steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 656, 200-215. | 2.6 | 29 |
| 160 | Combined atom probe tomography and density functional theory investigation of the Al off-stoichiometry of Mn_3C -carbides in an austenitic Fe-Mn-Al-C low density steel. Acta Materialia, 2016, 106, 229-238. | 3.8 | 97 |
| 161 | Different strain rate sensitivities between Fe-22Mn-0.6C and Fe-30Mn-3Si-3Al twinning-induced plasticity steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 655, 251-255. | 2.6 | 38 |
| 162 | Softening behavior by excessive twinning and adiabatic heating at high strain rate in a Fe-20Mn-0.6C TWIP steel. Acta Materialia, 2016, 103, 229-242. | 3.8 | 107 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Structural/textural changes and strengthening of an advanced high-Mn steel subjected to cold rolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 651, 763-773. | 2.6 | 46 |
| 164 | The effects of grain size on yielding, strain hardening, and mechanical twinning in Fe-18Mn-0.6C-1.5Al twinning-induced plasticity steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 652, 212-220. | 2.6 | 96 |
| 165 | Effects of Al content on non-metallic inclusion evolution in Fe-16Mn-0.6C high Mn TWIP steel. <i>Ironmaking and Steelmaking</i> , 2016, 43, 234-242. | 1.1 | 34 |
| 166 | Grain size dependence of hardness and fracture toughness in pure near fully-dense boron carbide ceramics. <i>Journal of the European Ceramic Society</i> , 2016, 36, 1829-1834. | 2.8 | 102 |
| 167 | Stress-strain response and microstructural evolution of a FeMnAl TWIP steel during tension-compression tests. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 655, 310-320. | 2.6 | 10 |
| 168 | A constitutive model for the tensile behaviour of TWIP steels: Composition and temperature dependencies. <i>Materials and Design</i> , 2016, 90, 340-349. | 3.3 | 53 |
| 169 | Experimental characterization and damage modeling of a particle reinforced TWIP-steel matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 662, 342-355. | 2.6 | 9 |
| 170 | Effects of high pressure torsion on microstructures and properties of an Al0.1CoCrFeNi high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 655, 283-291. | 2.6 | 101 |
| 171 | Effect of crystalline grain structures on the mechanical properties of twinning-induced plasticity steel. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2016, 32, 181-187. | 1.5 | 18 |
| 172 | Work hardening behavior of nanotwinned austenitic grains in a metastable austenitic stainless steel. <i>Scripta Materialia</i> , 2016, 114, 133-136. | 2.6 | 39 |
| 173 | Influence of Al on the temperature dependence of strain hardening behavior and glide planarity in Fe-Cr-Ni-Mn-C austenitic stainless steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 649, 301-312. | 2.6 | 31 |
| 174 | Nanoindentation characterization of nano-twinned grains in an austenitic stainless steel. <i>Scripta Materialia</i> , 2016, 112, 19-22. | 2.6 | 23 |
| 175 | Strain hardening behavior of nanograined/ultrafine-grained (NG/UFG) austenitic 16Cr-10Ni stainless steel and its relationship to austenite stability and deformation behavior. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 649, 153-157. | 2.6 | 31 |
| 176 | The effect of carbon on the microstructures, mechanical properties, and deformation mechanisms of thermo-mechanically treated Fe40.4Ni11.3Mn34.8Al7.5Cr6 high entropy alloys. <i>Acta Materialia</i> , 2017, 126, 346-360. | 3.8 | 200 |
| 177 | Influence of $\frac{1}{2}\sqrt{2}$ interface phase on the tensile properties of laser cladding deposited Ti-6Al-4V titanium alloy. <i>Journal of Materials Science and Technology</i> , 2017, 33, 675-681. | 5.6 | 75 |
| 178 | Improved stretch formability of AZ31 sheet via grain size control. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 688, 56-61. | 2.6 | 18 |
| 179 | Deformation mechanisms of Mo alloyed FeCoCrNi high entropy alloy: In situ neutron diffraction. <i>Acta Materialia</i> , 2017, 127, 471-480. | 3.8 | 153 |
| 180 | Understanding martensite and twin formation in austenitic steels: A model describing TRIP and TWIP effects. <i>Acta Materialia</i> , 2017, 128, 120-134. | 3.8 | 186 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Negative to positive transition of strain rate sensitivity in Fe-22Mn-0.6C-x(Al) twinning-induced plasticity steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 690, 146-157. | 2.6 | 50 |
| 182 | Equal channel angular pressing of a TWIP steel: microstructure and mechanical response. <i>Journal of Materials Science</i> , 2017, 52, 6291-6309. | 1.7 | 26 |
| 183 | Twin-Induced Plasticity of an ECAP-Processed TWIP Steel. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 554-562. | 1.2 | 17 |
| 184 | A novel ultrafine-grained Fe 22Mn 0.6C TWIP steel with superior strength and ductility. <i>Materials Characterization</i> , 2017, 126, 74-80. | 1.9 | 83 |
| 185 | Tensile deformation behavior and deformation twinning of an equimolar CoCrFeMnNi high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 689, 122-133. | 2.6 | 166 |
| 186 | {332}<113> detwinning in a multilayered bcc-Ti"10Mo"Fe alloy. <i>Journal of Materials Science</i> , 2017, 52, 7858-7867. | 1.7 | 9 |
| 187 | Residual Stress Effect on the Delayed Fracture of Twinning-Induced Plasticity Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 2692-2696. | 1.1 | 16 |
| 188 | Dislocation interaction and twinning-induced plasticity in face-centered cubic Fe-Mn-C micro-pillars. <i>Acta Materialia</i> , 2017, 132, 162-173. | 3.8 | 41 |
| 189 | Dual mechanisms of grain refinement in a FeCoCrNi high-entropy alloy processed by high-pressure torsion. <i>Scientific Reports</i> , 2017, 7, 46720. | 1.6 | 63 |
| 190 | Transformation and twinning induced plasticity in an advanced high Mn austenitic steel processed by martensite reversion treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 696, 511-519. | 2.6 | 21 |
| 191 | Slip versus twinning in low and very low stacking-fault energy Cu-Al alloy single crystals. <i>Acta Materialia</i> , 2017, 133, 109-119. | 3.8 | 20 |
| 192 | Novel 1.5&percent;GPa-strength with 50%-ductility by transformation-induced plasticity of non-recrystallized austenite in duplex steels. <i>Scientific Reports</i> , 2017, 7, 1255. | 1.6 | 48 |
| 193 | Effects of martensitic transformability and dynamic strain age hardenability on plasticity in metastable austenitic steels containing carbon. <i>Journal of Materials Science</i> , 2017, 52, 7868-7882. | 1.7 | 38 |
| 194 | The effect of carbon on hydrogen embrittlement in stable Cr-Ni-Mn-N austenitic stainless steels. <i>Corrosion Science</i> , 2017, 124, 63-70. | 3.0 | 33 |
| 195 | In-situ neutron diffraction study on the tension-compression fatigue behavior of a twinning induced plasticity steel. <i>Scripta Materialia</i> , 2017, 137, 83-87. | 2.6 | 27 |
| 196 | Twinning-mediated work hardening and texture evolution in CrCoFeMnNi high entropy alloys at cryogenic temperature. <i>Materials and Design</i> , 2017, 131, 419-427. | 3.3 | 54 |
| 197 | Mechanical and microstructural characterization of powder metallurgy CoCrNi medium entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 701, 370-380. | 2.6 | 95 |
| 198 | Twinning and dynamic strain aging behavior during tensile deformation of Fe-Mn-C TWIP steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 700, 250-258. | 2.6 | 26 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 199 | Deformation mechanisms during large strain deformation of high Mn TWIP steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 700, 209-219. | 2.6 | 15 |
| 200 | Analysis of tensile deformation behavior of AM2B [®] advanced high-strength steel using electron back-scattered diffraction technique. <i>Materials Characterization</i> , 2017, 130, 64-73. | 1.9 | 6 |
| 201 | Current state of Fe-Mn-Al-C low density steels. <i>Progress in Materials Science</i> , 2017, 89, 345-391. | 16.0 | 427 |
| 202 | A TRIP-assisted dual-phase high-entropy alloy: Grain size and phase fraction effects on deformation behavior. <i>Acta Materialia</i> , 2017, 131, 323-335. | 3.8 | 474 |
| 203 | Substructure hardening in duplex low density steel. <i>Materials and Design</i> , 2017, 116, 472-480. | 3.3 | 35 |
| 204 | Forecasting Low-Cycle Fatigue Performance of Twinning-Induced Plasticity Steels: Difficulty and Attempt. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 5833-5848. | 1.1 | 10 |
| 205 | Effect of Mn and Al contents on hot ductility of high alloy Fe-xMn-C-yAl austenite TWIP steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 708, 360-374. | 2.6 | 41 |
| 206 | Effects of torsional deformation on the microstructures and mechanical properties of a CoCrFeNiMo _{0.15} high-entropy alloy. <i>Philosophical Magazine</i> , 2017, 97, 3229-3245. | 0.7 | 33 |
| 207 | Strong and Ductile Non-equiatomic High-Entropy Alloys: Design, Processing, Microstructure, and Mechanical Properties. <i>Jom</i> , 2017, 69, 2099-2106. | 0.9 | 222 |
| 208 | Investigation of Work Hardening Behavior of Inconel X-750 Alloy. <i>Acta Metallurgica Sinica (English)</i> Tj ETQq1 1 0.784314 rgBT /Overlo 1.5 | | |
| 209 | Phase stability, physical properties and strengthening mechanisms of concentrated solid solution alloys. <i>Current Opinion in Solid State and Materials Science</i> , 2017, 21, 267-284. | 5.6 | 66 |
| 210 | Effect of Cr on mechanical properties and corrosion behaviors of Fe-Mn-C-Al-Cr-N TWIP steels. <i>Journal of Materials Science and Technology</i> , 2017, 33, 1555-1560. | 5.6 | 46 |
| 211 | Tensile Fracture Modes in Fe-22Mn-0.6C and Fe-30Mn-3Si-3Al Twinning-Induced Plasticity (TWIP) Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 4458-4462. | 1.1 | 14 |
| 212 | Remarkable strength of CoCrFeNi high-entropy alloy wires at cryogenic and elevated temperatures. <i>Scripta Materialia</i> , 2017, 141, 125-128. | 2.6 | 74 |
| 213 | Cooling rate effect on microstructure and mechanical properties of Al x CoCrFeNi high entropy alloys. <i>Materials and Design</i> , 2017, 132, 392-399. | 3.3 | 74 |
| 214 | The premature necking of twinning-induced plasticity steels. <i>Acta Materialia</i> , 2017, 136, 1-10. | 3.8 | 41 |
| 215 | Partial recrystallization of gum metal to achieve enhanced strength and ductility. <i>Acta Materialia</i> , 2017, 135, 400-410. | 3.8 | 38 |
| 216 | Dramatic improvement of strain hardening and ductility to 95% in highly-deformable high-strength duplex lightweight steels. <i>Scientific Reports</i> , 2017, 7, 1927. | 1.6 | 37 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Prediction of earing in TWIP steel sheets based on coupled twinning crystal plasticity model. International Journal of Advanced Manufacturing Technology, 2017, 89, 3037-3047. | 1.5 | 11 |
| 218 | Substructure induced twinning in low density steel. Scripta Materialia, 2017, 128, 69-73. | 2.6 | 36 |
| 219 | Compatible strain evolution in two phases due to epsilon martensite transformation in duplex TRIP-assisted stainless steels with high hydrogen embrittlement resistance. International Journal of Plasticity, 2017, 88, 53-69. | 4.1 | 68 |
| 220 | Comparative study on small fatigue crack propagation between Fe-30Mn-3Si-3Al and Fe-23Mn-0.5C twinning-induced plasticity steels: Aspects of non-propagation of small fatigue cracks. International Journal of Fatigue, 2017, 94, 1-5. | 2.8 | 27 |
| 221 | Strong grain-size effect on deformation twinning of an Al _{0.1} CoCrFeNi high-entropy alloy. Materials Research Letters, 2017, 5, 276-283. | 4.1 | 131 |
| 222 | Stacking fault energy and compression deformation behavior of ultra-high manganese steel. Procedia Engineering, 2017, 207, 1809-1814. | 1.2 | 4 |
| 223 | Wear behavior and subsurface layer work hardening mechanism of Fe-24.1Mn-1.21C-0.48Si steel. Procedia Engineering, 2017, 207, 2251-2256. | 1.2 | 11 |
| 224 | Investigation of the Microstructure Evolution in a Fe-17Mn-1.5Al-0.3C Steel via In Situ Synchrotron X-ray Diffraction during a Tensile Test. Materials, 2017, 10, 1129. | 1.3 | 32 |
| 225 | Mechanical Properties and Microstructures of a Novel Low-carbon High-silicon Martensitic Steel. ISIJ International, 2017, 57, 558-563. | 0.6 | 6 |
| 226 | Overcoming the strength-ductility trade-off via the formation of a thermally stable and plastically unstable austenitic phase in cold-worked steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 721, 74-80. | 2.6 | 8 |
| 227 | Microstructures and mechanical properties of a welded CoCrFeMnNi high-entropy alloy. Science and Technology of Welding and Joining, 2018, 23, 585-595. | 1.5 | 70 |
| 228 | Effect of Microalloy Elements on Dynamic Recrystallization Behavior of a High-Manganese Steel. Steel Research International, 2018, 89, 1700559. | 1.0 | 16 |
| 229 | Understanding the deformation mechanism and mechanical characteristics of cementitious mineral analogues from first principles and reactive force field molecular dynamics. Physical Chemistry Chemical Physics, 2018, 20, 13920-13933. | 1.3 | 6 |
| 230 | Crystallographic examination of the interaction between texture evolution, mechanically induced martensitic transformation and twinning in nanostructured bainite. Journal of Alloys and Compounds, 2018, 752, 505-519. | 2.8 | 19 |
| 231 | The Role of Transformation-Induced Plasticity in the Development of Advanced High Strength Steels. Advanced Engineering Materials, 2018, 20, 1701083. | 1.6 | 77 |
| 232 | In-situ neutron diffraction investigation on twinning/detwinning activities during tension-compression load reversal in a twinning induced plasticity steel. Scripta Materialia, 2018, 150, 168-172. | 2.6 | 30 |
| 233 | Combined strengthening from nanotwins and nanoprecipitates in an iron-based superalloy. Acta Materialia, 2018, 151, 310-320. | 3.8 | 85 |
| 234 | High Strength and Ductility of Additively Manufactured 316L Stainless Steel Explained. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 3011-3027. | 1.1 | 197 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 235 | Recovery of tensile properties of twinning-induced plasticity steel via electropulsing induced void healing. <i>Scripta Materialia</i> , 2018, 147, 88-92. | 2.6 | 57 |
| 236 | Strengthening and toughening austenitic steel by introducing gradient martensite via cyclic forward/reverse torsion. <i>Materials and Design</i> , 2018, 143, 150-159. | 3.3 | 36 |
| 237 | Thermomechanical processing of advanced high strength steels. <i>Progress in Materials Science</i> , 2018, 94, 174-242. | 16.0 | 295 |
| 238 | Effect of Post-deformation Annealing Treatment on the Microstructural Evolution of a Cold-Worked Corrosion-Resistant Superalloy (CRSA) Steel. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 1168-1176. | 1.2 | 2 |
| 239 | Temperature dependent strain hardening and fracture behavior of TWIP steel. <i>International Journal of Plasticity</i> , 2018, 104, 80-103. | 4.1 | 98 |
| 240 | Mechanical Properties and Applications of a New Stainless TWIP Steel. <i>Lecture Notes in Mechanical Engineering</i> , 2018, , 39-47. | 0.3 | 0 |
| 241 | Evolution of Texture in Some Mn Steel. <i>Lecture Notes in Mechanical Engineering</i> , 2018, , 49-58. | 0.3 | 2 |
| 242 | Reviews on factors affecting fatigue behavior of high-Mn steels. <i>Metals and Materials International</i> , 2018, 24, 1-14. | 1.8 | 42 |
| 243 | Advanced High Strength Steel. <i>Lecture Notes in Mechanical Engineering</i> , 2018, , . | 0.3 | 10 |
| 244 | Development of high-strength Co-free high-entropy alloys hardened by nanosized precipitates. <i>Scripta Materialia</i> , 2018, 148, 51-55. | 2.6 | 154 |
| 245 | The influence of silicon additions on the deformation behavior of austenite-ferrite duplex medium manganese steels. <i>Acta Materialia</i> , 2018, 148, 249-262. | 3.8 | 103 |
| 246 | On the Utility of Crystal Plasticity Modeling to Uncover the Individual Roles of Microdeformation Mechanisms on the Work Hardening Response of Fe-23Mn-0.5C TWIP Steel in the Presence of Hydrogen. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2018, 140, . | 0.8 | 4 |
| 247 | Second-phase hardening and rule of mixture, microbands and dislocation hardening in Fe 67.4% Cr 15.5 Ni 14.1 Si 3.0 B x (x = 0, 2) alloy systems. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 715, 214-225. | 2.6 | 8 |
| 248 | Characterization of cold-rolled heterogeneous microstructure formed by multimodal deformation in an Fe-Ni-Al-C alloy with lattice softening. <i>Materials and Design</i> , 2018, 153, 166-176. | 3.3 | 6 |
| 249 | Tailoring Microstructure and Properties of Fine Grained Magnesium Alloys by Severe Plastic Deformation. <i>Advanced Engineering Materials</i> , 2018, 20, 1700785. | 1.6 | 28 |
| 250 | Influence of the Strain History on TWIP Steel Deformation Mechanisms in the Deep-Drawing Process. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 2069-2083. | 1.1 | 4 |
| 251 | β phase acts as a switch between dislocation channeling and joint twinning- and transformation-induced plasticity in a metastable β ² titanium alloy. <i>Acta Materialia</i> , 2018, 151, 67-77. | 3.8 | 187 |
| 252 | Mechanical properties of an Fe-30Mn-4Si-2Al alloy after rolling at different temperatures ranging from 298 to 1073 K. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 725, 127-137. | 2.6 | 19 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 253 | Temperature-Dependence of the Mechanical Responses for Two Types of Twinning-Induced Plasticity Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 1475-1480. | 1.1 | 4 |
| 254 | Ultrafine-grained CoCrFeMnNi high-entropy alloy produced by cryogenic multi-pass caliber rolling. <i>Journal of Alloys and Compounds</i> , 2018, 742, 290-295. | 2.8 | 52 |
| 255 | The sequential twinning-transformation induced plasticity effects in a thermomechanically processed high Mn austenitic steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 725, 242-249. | 2.6 | 18 |
| 256 | Influence of deformation and annealing twinning on the microstructure and texture evolution of face-centered cubic high-entropy alloys. <i>Acta Materialia</i> , 2018, 150, 88-103. | 3.8 | 151 |
| 257 | Microstructural evolution of a nanotwinned steel under extremely high-strain-rate deformation. <i>Acta Materialia</i> , 2018, 149, 407-415. | 3.8 | 19 |
| 258 | The effect of deformation twins on the quasi-cleavage crack propagation in twinning-induced plasticity steels. <i>Acta Materialia</i> , 2018, 150, 59-68. | 3.8 | 33 |
| 259 | Twinning-induced plasticity (TWIP) steels. <i>Acta Materialia</i> , 2018, 142, 283-362. | 3.8 | 963 |
| 260 | Effect of strain rate on tensile and serration behaviors of an austenitic Fe-22Mn-0.7C twinning-induced plasticity steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 711, 22-28. | 2.6 | 46 |
| 261 | Deformation twinning and dislocation processes in nanotwinned copper by molecular dynamics simulations. <i>Computational Materials Science</i> , 2018, 142, 59-71. | 1.4 | 21 |
| 262 | Influence of rolling asymmetry on the microstructure, texture and mechanical behavior of high-manganese twinning-induced plasticity steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 709, 172-180. | 2.6 | 15 |
| 263 | Deformation mechanism transition in Fe-17Mn-0.4C-0.06V TWIP steel with different strain rates. <i>Materials Science and Technology</i> , 2018, 34, 242-251. | 0.8 | 14 |
| 264 | Unexpected cyclic stress-strain response of dual-phase high-entropy alloys induced by partial reversibility of deformation. <i>Scripta Materialia</i> , 2018, 143, 63-67. | 2.6 | 66 |
| 265 | Criteria for predicting twin-induced plasticity in solid solution copper alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 711, 492-497. | 2.6 | 25 |
| 266 | Serrated Flow and Dynamic Strain Aging in Fe-Mn-C TWIP Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 147-161. | 1.1 | 20 |
| 267 | Texture-directed twin formation propensity in Al with high stacking fault energy. <i>Acta Materialia</i> , 2018, 144, 226-234. | 3.8 | 36 |
| 268 | Effect of short-range order on microstructure, texture and strain hardening of cold drawn Cu-10 at.%Mn alloy. <i>Materials Characterization</i> , 2018, 135, 32-39. | 1.9 | 8 |
| 269 | Effects of strain rate on mechanical properties and deformation behavior of an austenitic Fe-25Mn-3Al-3Si TWIP-TRIP steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 711, 78-92. | 2.6 | 78 |
| 270 | Anisotropic strengthening of nanotwinned austenitic grains in a nanotwinned stainless steel. <i>Scripta Materialia</i> , 2018, 142, 15-19. | 2.6 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 271 | Effect of C content on microstructure and tensile properties of as-cast CoCrFeMnNi high entropy alloy. <i>Materials Chemistry and Physics</i> , 2018, 210, 136-145. | 2.0 | 139 |
| 272 | Dislocation and twinning behaviors in high manganese steels in respect to hydrogen and aluminum alloying. <i>Procedia Structural Integrity</i> , 2018, 13, 1453-1459. | 0.3 | 3 |
| 273 | Design of high-manganese steels for additive manufacturing applications with energy-absorption functionality. <i>Materials and Design</i> , 2018, 160, 1250-1264. | 3.3 | 53 |
| 274 | New developments of advanced high-strength steels for automotive applications. <i>Comptes Rendus Physique</i> , 2018, 19, 641-656. | 0.3 | 125 |
| 275 | Deformation Properties of Austenitic Stainless Steels with Different Stacking Fault Energies. <i>Materials Science Forum</i> , 0, 941, 190-197. | 0.3 | 4 |
| 276 | Ultrahigh cryogenic strength and exceptional ductility in ultrafine-grained CoCrFeMnNi high-entropy alloy with fully recrystallized structure. <i>Materials Today Nano</i> , 2018, 4, 46-53. | 2.3 | 136 |
| 277 | Dislocation plasticity reigns in a traditional twinning-induced plasticity steel by in situ observation. <i>Materials Today Nano</i> , 2018, 3, 48-53. | 2.3 | 43 |
| 278 | Effect of copper and aluminum contents on wire drawing behavior in twinning-induced plasticity steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 737, 188-197. | 2.6 | 21 |
| 279 | Improving the strength and retaining the ductility of microstructural graded coarse-grained materials with low stacking fault energy. <i>Materials and Design</i> , 2018, 160, 21-33. | 3.3 | 26 |
| 280 | Microstructure and mechanical properties of stainless steel 316L vertical struts manufactured by laser powder bed fusion process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 736, 27-40. | 2.6 | 134 |
| 281 | Strain hardening and nanocrystallization behaviors in Hadfield steel subjected to surface severe plastic deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 729, 178-184. | 2.6 | 34 |
| 282 | Effects of alloying addition on deformation mechanisms, microstructure, texture and mechanical properties in Fe-12Mn-0.5C austenitic steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 729, 385-397. | 2.6 | 18 |
| 283 | Simultaneous enhancement of strength and plasticity by nano B ₂ clusters and nano- δ phase in a low carbon low alloy steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 730, 119-136. | 2.6 | 23 |
| 284 | Study on the mechanical behavior of twinning-induced plasticity steel processed by warm forging and annealing. <i>Journal of Materials Science</i> , 2018, 53, 14645-14656. | 1.7 | 4 |
| 285 | Dynamically reinforced heterogeneous grain structure prolongs ductility in a medium-entropy alloy with gigapascal yield strength. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7224-7229. | 3.3 | 338 |
| 286 | Quantitative analysis of {332} ϵ twinning in a Ti-15Mo alloy by <i>in situ</i> scanning electron microscopy. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 474-483. | 2.8 | 7 |
| 287 | Ultra-high strength and ductility from rolling and annealing of a Ni-Cr-Co superalloy. <i>Scripta Materialia</i> , 2018, 155, 94-98. | 2.6 | 19 |
| 288 | Ab Initio Guided Low Temperature Synthesis Strategy for Smooth Face-Centred Cubic FeMn Thin Films. <i>Metals</i> , 2018, 8, 384. | 1.0 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 289 | Deformation mechanisms of Al _{0.1} CoCrFeNi high entropy alloy at ambient and cryogenic temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 733, 408-413. | 2.6 | 40 |
| 290 | Strain Rate Sensitivity of a TRIP-Assisted Dual-Phase High-Entropy Alloy. <i>Frontiers in Materials</i> , 2018, 5, . | 1.2 | 43 |
| 291 | Influence of deformation induced nanoscale twinning and FCC-HCP transformation on hardening and texture development in medium-entropy CrCoNi alloy. <i>Acta Materialia</i> , 2018, 158, 38-52. | 3.8 | 135 |
| 292 | On the intercritical annealing parameters and ensuing mechanical properties of low-carbon medium-Mn steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 733, 246-256. | 2.6 | 36 |
| 293 | Deformation and annealing behaviour of dual phase TWIP steel from the perspective of residual stress, faults, microstructures and mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 733, 43-58. | 2.6 | 16 |
| 294 | On the nature of twin boundary-associated strengthening in Fe-Mn-C steel. <i>Scripta Materialia</i> , 2018, 156, 27-31. | 2.6 | 30 |
| 295 | Modeling the Effect of Primary and Secondary Twinning on Texture Evolution during Severe Plastic Deformation of a Twinning-Induced Plasticity Steel. <i>Materials</i> , 2018, 11, 863. | 1.3 | 9 |
| 296 | Substructure Development and Deformation Twinning Stimulation through Regulating the Processing Path during Multi-axial Forging of Twinning Induced Plasticity Steel. <i>Advanced Engineering Materials</i> , 2018, 20, 1800453. | 1.6 | 11 |
| 297 | Grain Boundary Engineering of Medium Mn TWIP Steels: A Novel Method to Enhance the Mechanical Properties. <i>ISIJ International</i> , 2018, 58, 1324-1331. | 0.6 | 4 |
| 298 | On the diffusive phase transformation mechanism assisted by extended dislocations during creep of a single crystal CoNi-based superalloy. <i>Acta Materialia</i> , 2018, 155, 362-371. | 3.8 | 89 |
| 299 | A novel way to enhance the strength of twinning induced plasticity (TWIP) steels. <i>Scripta Materialia</i> , 2018, 154, 207-211. | 2.6 | 48 |
| 300 | Quantitative analysis of electron channeling contrast of dislocations. <i>Ultramicroscopy</i> , 2019, 206, 112826. | 0.8 | 11 |
| 301 | Stacking Fault Energy of Austenite Phase in Medium Manganese Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 4851-4866. | 1.1 | 17 |
| 302 | Beta-type Ti-Nb-Zr-Cr alloys with large plasticity and significant strain hardening. <i>Materials and Design</i> , 2019, 181, 108064. | 3.3 | 44 |
| 303 | Impact of Short-Range Clustering on the Multistage Work-Hardening Behavior in Cu-Ni Alloys. <i>Metals</i> , 2019, 9, 151. | 1.0 | 22 |
| 304 | Microstructure design and in-situ investigation of TRIP/TWIP effects in a forged dual-phase Ti-10V-2Fe-3Al alloy. <i>Materialia</i> , 2019, 8, 100507. | 1.3 | 29 |
| 305 | Bioceramic enhances the degradation and bioactivity of iron bone implant. <i>Materials Research Express</i> , 2019, 6, 115401. | 0.8 | 13 |
| 306 | Effect of Deformation Path on the Microstructure and Mechanical Behavior of TWIP980 Steel. <i>Journal of Manufacturing and Materials Processing</i> , 2019, 3, 12. | 1.0 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 307 | Evolution of Substructure of a Non-equiatomic FeMnCrCo High Entropy Alloy Deformed at Ambient Temperature. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 5079-5090. | 1.1 | 15 |
| 308 | Microstructure and Mechanical Properties of Austenitic Steel EK-164 After Thermomechanical Treatments. <i>Russian Physics Journal</i> , 2019, 62, 698-704. | 0.2 | 11 |
| 309 | Effect of Stress States on Twinning Behavior in Twinning-Induced Plasticity Steel. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 4811-4825. | 1.2 | 10 |
| 310 | Microstructural aspects of energy absorption of high manganese steels. <i>Procedia Manufacturing</i> , 2019, 27, 91-97. | 1.9 | 20 |
| 311 | Anomalous work hardening behavior of Fe ₄₀ Mn ₄₀ Cr ₁₀ Co ₁₀ high entropy alloy single crystals deformed by twinning and slip. <i>Acta Materialia</i> , 2019, 181, 555-569. | 3.8 | 72 |
| 312 | Crystallographic-orientation-dependent tensile behaviours of stainless steel 316L fabricated by laser powder bed fusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 766, 138395. | 2.6 | 118 |
| 313 | Microstructure characteristics, strengthening and toughening mechanism of rolled and aged multilayer TWIP/maraging steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 767, 138426. | 2.6 | 26 |
| 314 | Nanoparticles-strengthened high-entropy alloys for cryogenic applications showing an exceptional strength-ductility synergy. <i>Scripta Materialia</i> , 2019, 164, 30-35. | 2.6 | 170 |
| 315 | Effects of Stacking Fault Energy on Deformation Mechanisms in Al-Added Medium Mn TWIP Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 3683-3696. | 1.1 | 15 |
| 316 | Hexagonal Closed-Packed Precipitation Enhancement in a NbTiHfZr Refractory High-Entropy Alloy. <i>Metals</i> , 2019, 9, 485. | 1.0 | 22 |
| 317 | Effect of temperature on the stacking fault energy and deformation behaviour in 316L austenitic stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 759, 490-497. | 2.6 | 112 |
| 318 | Deformation behaviour of a low carbon high Mn TWIP/TRIP steel. <i>Materials Science and Technology</i> , 2019, 35, 1483-1496. | 0.8 | 6 |
| 319 | Effects of Strain Rate on the TRIP→TWIP Transition of an Austenitic Fe-18Mn-2Si-2Al Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 4058-4066. | 1.1 | 11 |
| 320 | Developing high-strength, ductile Ni-free Fe-Cr-Mn-C-N stainless steels by interstitial-alloying and thermomechanical processing. <i>Journal of Materials Research and Technology</i> , 2019, 8, 2846-2853. | 2.6 | 13 |
| 321 | Experimental in-situ verification of the unloading mechanics of dual phase steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 760, 134-140. | 2.6 | 6 |
| 322 | Revealing the Hall-Petch relationship of Al _{0.1} CoCrFeNi high-entropy alloy and its deformation mechanisms. <i>Journal of Alloys and Compounds</i> , 2019, 795, 269-274. | 2.8 | 51 |
| 323 | Microstructure and mechanical properties of cold drawing CoCrFeMnNi high entropy alloy. <i>Journal of Alloys and Compounds</i> , 2019, 795, 45-53. | 2.8 | 42 |
| 324 | Effect of volume fraction and mechanical stability of austenite on ductility of medium Mn steel. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 1209-1218. | 1.4 | 16 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 325 | Hydrogen Embrittlement and Improved Resistance of Al Addition in Twinning-Induced Plasticity Steel: First-Principles Study. <i>Materials</i> , 2019, 12, 1341. | 1.3 | 1 |
| 326 | Experimental study of the $\hat{\beta}$ -surface of austenitic stainless steels. <i>Acta Materialia</i> , 2019, 173, 34-43. | 3.8 | 6 |
| 327 | Twin boundary bending during tensile deformation and its temperature dependence. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 759, 47-54. | 2.6 | 7 |
| 328 | Effect of Tempering on the Microstructure and Tensile Properties of a Martensitic Medium-Mn Lightweight Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 2655-2664. | 1.1 | 18 |
| 329 | Dramatic Increase of Strength and Ductility in Fe-22Mn-1.0C Twinning-Induced Plasticity Steel at Elevated Temperature. <i>Advanced Engineering Materials</i> , 2019, 21, 1800670. | 1.6 | 1 |
| 330 | On the influence of grain size on the TWIP/TRIP-effect and texture development in high-manganese steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 754, 152-160. | 2.6 | 16 |
| 331 | The microstructure dependence of drawability in ferritic, pearlitic, and TWIP steels during wire drawing. <i>Journal of Materials Science</i> , 2019, 54, 8743-8759. | 1.7 | 29 |
| 332 | Drawing Direction Effect on Microstructure and Mechanical Properties of Twinning-Induced Plasticity Steel During Wire Drawing. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 2834-2844. | 1.2 | 11 |
| 333 | Metastability alloy design. <i>MRS Bulletin</i> , 2019, 44, 266-272. | 1.7 | 36 |
| 334 | Strain hardening mechanisms during cold rolling of a high-Mn steel: Interplay between submicron defects and microtexture. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 754, 636-649. | 2.6 | 18 |
| 335 | Structure-Property Relationships under Extreme Dynamic Environments: Shock Recovery Experiments. <i>Synthesis SEM Lectures on Experimental Mechanics</i> , 2019, 2, 1-155. | 0.3 | 11 |
| 336 | Modeling the Work Hardening Behavior of High-Manganese Steels. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 1591-1600. | 1.2 | 2 |
| 337 | Formation abilities of nano-twin and $\hat{\mu}$ -martensite in laser surface modification of a mid-carbon steel. <i>Applied Surface Science</i> , 2019, 479, 634-638. | 3.1 | 10 |
| 338 | Deformation mechanisms of mechanically induced phase transformations in iron. <i>Computational Materials Science</i> , 2019, 162, 12-20. | 1.4 | 14 |
| 339 | Dynamic Strain Aging and Serration Behavior of Three High-Manganese Austenitic Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 1693-1700. | 1.1 | 7 |
| 340 | Effect of hydrogen-induced surface steps on the nanomechanical behavior of a CoCrFeMnNi high-entropy alloy revealed by in-situ electrochemical nanoindentation. <i>Intermetallics</i> , 2019, 114, 106605. | 1.8 | 30 |
| 341 | Cu addition effects on TRIP to TWIP transition and tensile property improvement of ultra-high-strength austenitic high-Mn steels. <i>Acta Materialia</i> , 2019, 166, 246-260. | 3.8 | 50 |
| 342 | Improved resistance to hydrogen environment embrittlement of warm-deformed 304 austenitic stainless steel in high-pressure hydrogen atmosphere. <i>Corrosion Science</i> , 2019, 148, 159-170. | 3.0 | 43 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 343 | Mechanical properties of high-entropy alloys with emphasis on face-centered cubic alloys. <i>Progress in Materials Science</i> , 2019, 102, 296-345. | 16.0 | 634 |
| 344 | Enhancing strength and strain hardenability via deformation twinning in fcc-based high entropy alloys reinforced with intermetallic compounds. <i>Acta Materialia</i> , 2019, 165, 420-430. | 3.8 | 155 |
| 345 | Achieving ultra-high strength and ductility in equiatomic CrCoNi with partially recrystallized microstructures. <i>Acta Materialia</i> , 2019, 165, 496-507. | 3.8 | 221 |
| 346 | Effect of hydrogen on nanomechanical properties in Fe-22Mn-0.6C TWIP steel revealed by in-situ electrochemical nanoindentation. <i>Acta Materialia</i> , 2019, 166, 618-629. | 3.8 | 57 |
| 347 | Significance of stacking fault energy in bulk nanostructured materials: Insights from Cu and its binary alloys as model systems. <i>Progress in Materials Science</i> , 2019, 101, 1-45. | 16.0 | 208 |
| 348 | A review on shape memory metallic alloys and their critical stress for twinning. <i>Intermetallics</i> , 2019, 105, 61-78. | 1.8 | 35 |
| 349 | Outstanding tensile properties of a precipitation-strengthened FeCoNiCrTi0.2 high-entropy alloy at room and cryogenic temperatures. <i>Acta Materialia</i> , 2019, 165, 228-240. | 3.8 | 373 |
| 350 | The influence of stacking fault energy on mechanical properties of Cu-Al-Zn alloys processed by surface mechanical attrition treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 744, 235-240. | 2.6 | 10 |
| 351 | Temperature dependence of strengthening mechanisms in a twinning-induced plasticity steel. <i>International Journal of Plasticity</i> , 2019, 116, 192-202. | 4.1 | 27 |
| 352 | Combined deformation twinning and short-range ordering causes serrated flow in high-manganese steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 746, 434-442. | 2.6 | 26 |
| 353 | Characterization of single crystalline austenitic stainless steel thin struts processed by laser powder bed fusion. <i>Scripta Materialia</i> , 2019, 163, 51-56. | 2.6 | 49 |
| 354 | Experimental investigation and phase diagram of CoCrMnNi-Fe system bridging high-entropy alloys and high-alloyed steels. <i>Journal of Alloys and Compounds</i> , 2019, 785, 320-327. | 2.8 | 32 |
| 355 | Strength and ductility of CrFeCoNiMo alloy with hierarchical microstructures. <i>International Journal of Plasticity</i> , 2019, 113, 255-268. | 4.1 | 121 |
| 356 | Hierarchical microstructure design to tune the mechanical behavior of an interstitial TRIP-TWIP high-entropy alloy. <i>Acta Materialia</i> , 2019, 163, 40-54. | 3.8 | 296 |
| 357 | Microstructure and enhanced strength of laser aided additive manufactured CoCrFeNiMn high entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 744, 137-144. | 2.6 | 166 |
| 358 | Effects of B ₂ O ₃ on Crystallization, Structure, and Heat Transfer of CaO-Al ₂ O ₃ -Based Mold Fluxes. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 291-303. | 1.0 | 27 |
| 359 | Deformation banding in a precipitation hardened aluminum alloy during simple shear deformation. <i>Scripta Materialia</i> , 2019, 162, 300-305. | 2.6 | 19 |
| 360 | Magnetic properties of a 17.6 Mn-TRIP steel: Study of strain-induced martensite formation, austenite reversion, and athermal ϵ -formation. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 473, 109-118. | 1.0 | 15 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 361 | The valuation of microstructural evolution in a thermo-mechanically processed transformation-twinning induced plasticity steel during strain hardening. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 754, 799-810. | 2.6 | 1 |
| 362 | Deformation behaviour of low carbon high Mn twinning-induced plasticity steel. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 763-771. | 1.1 | 3 |
| 363 | Effect of reduction in area per pass on strain distribution and microstructure during caliber rolling in twinning-induced plasticity steel. <i>Journal of Iron and Steel Research International</i> , 2020, 27, 62-74. | 1.4 | 11 |
| 364 | Simultaneous enhancement of strength and ductility in a NiCoCrFe high-entropy alloy upon dynamic tension: Micromechanism and constitutive modeling. <i>International Journal of Plasticity</i> , 2020, 124, 226-246. | 4.1 | 163 |
| 365 | Mechanical properties and deformation behavior of dual-phase Al _{0.6} CoCrFeNi high-entropy alloys with heterogeneous structure at room and cryogenic temperatures. <i>Journal of Alloys and Compounds</i> , 2020, 816, 152663. | 2.8 | 42 |
| 366 | The mechanism of mechanical twinning near grain boundaries in twinning-induced plasticity steel. <i>Scripta Materialia</i> , 2020, 174, 62-67. | 2.6 | 17 |
| 367 | Study of hydrogen-induced delayed fracture in high-Mn TWIP/TRIP steels during in situ electrochemical hydrogen-charging: Role of microstructure and strain rate in crack initiation and propagation. <i>Corrosion Science</i> , 2020, 162, 108191. | 3.0 | 32 |
| 368 | Effects of transformation-induced plasticity on the small-scale deformation behavior of single crystalline complex concentrated alloys. <i>Scripta Materialia</i> , 2020, 176, 122-125. | 2.6 | 5 |
| 369 | TWIP and TRIP-associated mechanical behaviors of Fe (CoCrMnNi) medium-entropy ferrous alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 782, 138896. | 2.6 | 26 |
| 370 | A review of thermal, microstructural and constitutive modelling of 9Cr steel for power plant applications: Towards a through-process model for structural integrity of welded connections. <i>International Journal of Pressure Vessels and Piping</i> , 2020, 180, 104037. | 1.2 | 2 |
| 371 | Plastic flow behavior of twinning induced plasticity steel from low to warm temperatures. <i>Journal of Materials Research and Technology</i> , 2020, 9, 1708-1719. | 2.6 | 10 |
| 372 | Combined Al and C alloying enables mechanism-oriented design of multi-principal element alloys: Ab initio calculations and experiments. <i>Scripta Materialia</i> , 2020, 178, 366-371. | 2.6 | 18 |
| 373 | An investigation of geometrically necessary dislocations and back stress in large grained tantalum via EBSD and CPFEM. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 772, 138704. | 2.6 | 30 |
| 374 | Anisotropic polycrystal plasticity due to microstructural heterogeneity: A multi-scale experimental and numerical study on additively manufactured metallic materials. <i>Acta Materialia</i> , 2020, 185, 340-369. | 3.8 | 64 |
| 375 | Microstructural evolution and strengthening of selective laser melted 316L stainless steel processed by high-pressure torsion. <i>Materials Characterization</i> , 2020, 159, 110012. | 1.9 | 37 |
| 376 | In-situ real time observation of martensite transformation in duplex fcc+hcp cobalt based entropic alloys. <i>Materialia</i> , 2020, 14, 100928. | 1.3 | 10 |
| 377 | Synergistic deformation pathways in a TWIP steel at cryogenic temperatures: In situ neutron diffraction. <i>Acta Materialia</i> , 2020, 200, 943-958. | 3.8 | 72 |
| 378 | Hydrogen, as an alloying element, enables a greater strength-ductility balance in an Fe-Cr-Ni-based, stable austenitic stainless steel. <i>Acta Materialia</i> , 2020, 199, 181-192. | 3.8 | 44 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 379 | Metal Temperature Estimation and Microstructure Evaluation of Long-Term Service-Exposed Super304H Steel Boiler Tubes. <i>Metals and Materials International</i> , 2021, 27, 5121-5132. | 1.8 | 2 |
| 380 | The impact of grain-scale strain localization on strain hardening of a high-Mn steel: Real-time tracking of the transition from the ϵ transformation to twinning. <i>Acta Materialia</i> , 2020, 197, 123-136. | 3.8 | 37 |
| 381 | Crystal-Glass High-Entropy Nanocomposites with Near Theoretical Compressive Strength and Large Deformability. <i>Advanced Materials</i> , 2020, 32, e2002619. | 11.1 | 66 |
| 382 | Zn-induced liquid metal embrittlement of galvanized high-Mn steel: Strain-rate dependency. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 793, 139996. | 2.6 | 16 |
| 383 | Effect of hydrogen on fracture locus of Fe-16Mn-0.6C-2.15Al TWIP steel. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 34227-34240. | 3.8 | 10 |
| 384 | Study of the alternative mechanism behind the constant strain hardening rate in high-nitrogen steels. <i>Materials Characterization</i> , 2020, 170, 110726. | 1.9 | 6 |
| 385 | Coexistence of multi-deformation modes in beta Ti alloys with improved yielding strength and ductility. <i>MATEC Web of Conferences</i> , 2020, 321, 11069. | 0.1 | 0 |
| 386 | Microstructural and Hardness Evolution in a Duplex Stainless Steel Processed by High-Pressure Torsion. <i>Crystals</i> , 2020, 10, 1138. | 1.0 | 6 |
| 387 | From single phase to dual-phase TRIP-TWIP titanium alloys: Design approach and properties. <i>Materialia</i> , 2020, 12, 100700. | 1.3 | 28 |
| 388 | Cyclic plasticity of an interstitial high-entropy alloy: experiments, crystal plasticity modeling, and simulations. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 142, 103971. | 2.3 | 50 |
| 389 | The role of Mn on twinning behavior and tensile properties of coarse- and fine-grained Fe-Mn-C twinning-induced plasticity steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 789, 139586. | 2.6 | 21 |
| 390 | Effects of Silicon on the Microstructure and Mechanical Properties of 15-15Ti Stainless Steel. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 1583-1590. | 1.5 | 4 |
| 391 | Strengthening the FeCoCrNiMo _{0.15} high entropy alloy by a gradient structure. <i>Journal of Alloys and Compounds</i> , 2020, 841, 155688. | 2.8 | 24 |
| 392 | Investigations of dislocation-type evolution and strain hardening during mechanical twinning in Fe-22Mn-0.6C twinning-induced plasticity steel. <i>Acta Materialia</i> , 2020, 195, 371-382. | 3.8 | 105 |
| 393 | Direct observations of collinear dislocation interaction in a Fe-17.4 Mn-1.50 Al-0.29 C (wt.%) austenitic steel under cyclic loading by in-situ electron channelling contrast imaging and cross-correlation electron backscatter diffraction. <i>Scripta Materialia</i> , 2020, 186, 341-345. | 2.6 | 13 |
| 394 | A Stress Orientation Analysis Framework for Dislocation Glide in Face-Centred Cubic Metals. <i>Crystals</i> , 2020, 10, 445. | 1.0 | 8 |
| 395 | Excellent combination of plasticity and ultra-high strength in a low-alloy automotive steel treated by conventional continuous annealing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 791, 139694. | 2.6 | 12 |
| 396 | Nano-precipitates strengthened non-equiatomic medium-entropy alloy with outstanding tensile properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 780, 139218. | 2.6 | 38 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 397 | High-temperature Tensile Behavior in Coarse-grained and Fine-grained Nb-containing 25Crâ€“20Ni Austenitic Stainless Steel. Acta Metallurgica Sinica (English Letters), 2020, 33, 1455-1465. | 1.5 | 4 |
| 398 | Mechanical Properties Improvement of CoCrFeMnNi _{0.1} High Entropy Alloy through Annealing Design. Transactions of the Indian Ceramic Society, 2020, 79, 100-105. | 0.4 | 2 |
| 399 | Thermodynamic analysis of high entropy alloys and their mechanical behavior in high and low-temperature conditions with a microstructural approach - A review. Intermetallics, 2020, 124, 106850. | 1.8 | 36 |
| 400 | Crystal plasticity finite element analysis of gradient nanostructured TWIP steel. International Journal of Plasticity, 2020, 130, 102703. | 4.1 | 63 |
| 401 | In-Situ Electron Channeling Contrast Imaging under Tensile Loading: Residual Stress, Dislocation Motion, and Slip Line Formation. Scientific Reports, 2020, 10, 2622. | 1.6 | 10 |
| 402 | Effects of Cu addition on formability and surface delamination phenomenon in high-strength high-Mn steels. Journal of Materials Science and Technology, 2020, 43, 44-51. | 5.6 | 9 |
| 403 | Excellent Combination of Tensile ductility and strength due to nanotwinning and a bimodal structure in cryorolled austenitic stainless steel. Scientific Reports, 2020, 10, 354. | 1.6 | 9 |
| 404 | A novel cobalt-free FeMnCrNi medium-entropy alloy with exceptional yield strength and ductility at cryogenic temperature. Journal of Alloys and Compounds, 2020, 827, 153981. | 2.8 | 87 |
| 405 | Tunable mechanical property and strain hardening behavior of a single-phase CoFeNi ₂ V _{0.5} Mo _{0.2} high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 776, 139027. | 2.6 | 16 |
| 406 | Dissociated dislocation-mediated carbon transport and diffusion in austenitic iron. Acta Materialia, 2020, 191, 43-50. | 3.8 | 36 |
| 407 | Effect of Temperature on the Mechanical Properties and Deformation Mechanism of a High Mn Steel With Composite Structure. Frontiers in Materials, 2020, 7, . | 1.2 | 3 |
| 408 | Grade-4 commercially pure titanium with ultrahigh strength achieved by twinning-induced grain refinement through cryogenic deformation. Journal of Materials Science and Technology, 2021, 66, 193-201. | 5.6 | 32 |
| 409 | Step-by-step texture modification through strain path change toward improvement of the hardening capacity in a twinning-induced-plasticity steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 799, 140269. | 2.6 | 1 |
| 410 | Gradient recrystallization to improve strength and ductility of medium-entropy alloy. Journal of Alloys and Compounds, 2021, 853, 157388. | 2.8 | 13 |
| 411 | Evaluation of depth of dislocation visibility in SEM electron channeling contrast imaging in Ti-6Al-4V alloy using serial sectioning method. Microscopy (Oxford, England), 2021, 70, 265-277. | 0.7 | 0 |
| 412 | Revisiting the role of prestrain history in the mechanical properties of ultrafine-grained CoCrFeMnNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 831, 139027. | 2.6 | 23 |
| 413 | Free-entropy alloy with exceptional yield strength and ductility at cryogenic temperature. Journal of Alloys and Compounds, 2021, 853, 157388. | 2.8 | 35 |
| 414 | Heterogeneous precipitates facilitate excellent mechanical properties in non-equiatomic medium-entropy alloy. Intermetallics, 2021, 129, 107036. | 1.8 | 15 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 415 | Effects of deformation and annealing on the microstructures and properties of a nonequiatomic Co ₂₉ Cr ₂₉ Fe ₂₉ Ni _{12.5} W _{0.5} high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 805, 140548. | 2.6 | 9 |
| 416 | Effect of gradient microstructure on the strength and ductility of medium-entropy alloy processed by severe torsion deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 801, 140429. | 2.6 | 21 |
| 417 | A TWIP-TRIP quinary high-entropy alloy: Tuning phase stability and microstructure for enhanced mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 801, 140441. | 2.6 | 37 |
| 418 | Effect of stable stacking fault energy and crystal orientation on fracture behaviour of thin metallic single crystals. <i>Philosophical Magazine</i> , 2021, 101, 929-963. | 0.7 | 1 |
| 419 | Microstructure and mechanical properties of bimetallic copper/brass laminates fabricated via accumulative press bonding. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 803, 140710. | 2.6 | 8 |
| 420 | A phenomenological model of deformation twinning kinetics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 803, 140700. | 2.6 | 6 |
| 421 | Multilayer Maraging/CoCrNi Composites With Synergistic Strengthening-Toughening Behavior. <i>Frontiers in Materials</i> , 2021, 7, . | 1.2 | 3 |
| 422 | Revealing the relationship between microstructures, textures, and mechanical behaviors of cold-rolled Al _{0.1} CoCrFeNi high-entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 804, 140752. | 2.6 | 24 |
| 423 | Investigation of solidification modes of high Manganese steels. <i>Materials Science and Technology</i> , 2021, 37, 446-457. | 0.8 | 2 |
| 424 | Adaptive domain misorientation approach for the EBSD measurement of deformation induced dislocation sub-structures. <i>Ultramicroscopy</i> , 2021, 222, 113203. | 0.8 | 35 |
| 425 | Deformation Mechanism in Fe ₆₁ Mn ₁₈ Si ₁₁ Cr ₁₀ Medium Entropy Alloy Under Different Strain Rates. <i>Acta Metallurgica Sinica (English Letters)</i> , 2021, 34, 1109-1119. | 1.5 | 0 |
| 426 | Multi-heterostructure and mechanical properties of N-doped FeMnCoCr high entropy alloy. <i>International Journal of Plasticity</i> , 2021, 139, 102965. | 4.1 | 88 |
| 427 | Corrosion fatigue behavior of Fe-16Mn-0.6C-1.68Al twinning-induced plasticity steel in simulated seawater. <i>Corrosion Science</i> , 2021, 182, 109282. | 3.0 | 19 |
| 428 | Hydrogen effect on the mechanical behaviour and microstructural features of a Fe-Mn-C twinning induced plasticity steel. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2021, 28, 835-846. | 2.4 | 6 |
| 429 | A non-equiatomic FeNiCoCr high-entropy alloy with excellent anti-corrosion performance and strength-ductility synergy. <i>Corrosion Science</i> , 2021, 183, 109341. | 3.0 | 109 |
| 430 | The microstructural effects on the mechanical response of polycrystals: A comparative experimental-numerical study on conventionally and additively manufactured metallic materials. <i>International Journal of Plasticity</i> , 2021, 140, 102941. | 4.1 | 18 |
| 431 | Influence of sample preparation on nanoindentation results of twinning-induced plasticity steel. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2021, 28, 877-887. | 2.4 | 1 |
| 432 | Mechanism of twinning induced plasticity in austenitic lightweight steel driven by compositional complexity. <i>Acta Materialia</i> , 2021, 210, 116814. | 3.8 | 41 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 451 | Grain size altering yielding mechanisms in ultrafine grained high-Mn austenitic steel: Advanced TEM investigations. <i>Journal of Materials Science and Technology</i> , 2021, 86, 192-203. | 5.6 | 29 |
| 452 | A precipitate-free AlCoFeNi eutectic high-entropy alloy with strong strain hardening. <i>Journal of Materials Science and Technology</i> , 2021, 89, 88-96. | 5.6 | 35 |
| 453 | Dynamic deformation behavior and microstructure evolution of CoCrNiMox medium entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 827, 142048. | 2.6 | 20 |
| 454 | Unusual relationship between impact toughness and grain size in a high-manganese steel. <i>Journal of Materials Science and Technology</i> , 2021, 89, 122-132. | 5.6 | 25 |
| 455 | Hierarchical grain size and nanotwin gradient microstructure for improved mechanical properties of a non-equiatomic CoCrFeMnNi high-entropy alloy. <i>Journal of Materials Science and Technology</i> , 2021, 92, 195-207. | 5.6 | 68 |
| 456 | Surface, microstructure, and tensile deformation characterization of LPBF SS316L microstruts micromachined with femtosecond laser. <i>Materials and Design</i> , 2021, 210, 110045. | 3.3 | 13 |
| 457 | Statistical study on the effects of heterogeneous deformation and grain boundary character on hydrogen-induced crack initiation and propagation in twinning-induced plasticity steels. <i>Corrosion Science</i> , 2021, 192, 109796. | 3.0 | 15 |
| 458 | Retained austenite-aided cyclic plasticity of the quenched 9Ni steel. <i>International Journal of Fatigue</i> , 2021, 152, 106445. | 2.8 | 6 |
| 459 | Composition-dependent slip planarity in mechanically-stable face centered cubic complex concentrated alloys and its mechanical effects. <i>Acta Materialia</i> , 2021, 220, 117314. | 3.8 | 24 |
| 460 | Ultrasonic nanocrystal surface modification for strength improvement and suppression of hydrogen permeation in multi-layered steel. <i>Journal of Alloys and Compounds</i> , 2021, 885, 160975. | 2.8 | 7 |
| 461 | C and N doping in high-entropy alloys: A pathway to achieve desired strength-ductility synergy. <i>Applied Materials Today</i> , 2021, 25, 101162. | 2.3 | 19 |
| 462 | Twinning-Induced Plasticity (TWIP) Steel. , 2022, , 95-105. | | 1 |
| 463 | Nanostructural metallic materials: Structures and mechanical properties. <i>Materials Today</i> , 2020, 38, 114-135. | 8.3 | 150 |
| 464 | Stress corrosion cracking and precipitation strengthening mechanism in TWIP steels: progress and prospects. <i>Corrosion Reviews</i> , 2020, 38, 473-488. | 1.0 | 12 |
| 465 | WpÅ,yw parametrÅ³w prÅ³by Åciskania na gorÅ...co na wÅ,aÅciwoÅci i strukturÅ™ stali wysokomanganowej dla motoryzacji. <i>Hutnik - WiadomoÅści Hutnicze</i> , 2015, 1, 10-14. | 0.0 | 1 |
| 466 | Regularities of Formation of Structure, Texture and Properties under the Combined Plastic Deformation of the Low-Carbon and Ultralow-Carbon Steels for Cold Press Forming. <i>Progress in Physics of Metals</i> , 2019, 20, 213-284. | 0.5 | 7 |
| 467 | Effects of Static and Dynamic Strain Aging on Hydrogen Embrittlement in TWIP Steels Containing Al. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2014, 100, 1132-1139. | 0.1 | 5 |
| 470 | Hydrogen and deuterium charging of site-specific specimen for atom probe tomography. <i>Open Research Europe</i> , 0, 1, 122. | 2.0 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 471 | The determining role of carbon addition on mechanical performance of a non-equiatomic high-entropy alloy. <i>Journal of Materials Science and Technology</i> , 2022, 110, 167-177. | 5.6 | 17 |
| 472 | Achieving superior strength-ductility balance in a novel heterostructured strong metastable β -Ti alloy. <i>International Journal of Plasticity</i> , 2021, 147, 103126. | 4.1 | 30 |
| 474 | Ocena struktury stali wysokomanganowych po procesach odkształdzenia. <i>Hutnik - Wiadomości Hutnicze</i> , 2015, 1, 32-36. | 0.0 | 0 |
| 475 | Plastyczność i mikrostruktura wysokomanganowej stali X55MnAl25-5 z efektem TWIP po próbach skręcania. <i>Hutnik - Wiadomości Hutnicze</i> , 2015, 1, 20-23. | 0.0 | 0 |
| 476 | Ocena wpływu dynamicznego odkształcania z wykorzystaniem metoda spadowego na podatność do odkształceń, plastycznych wybranych stali wysokomanganowych. <i>Hutnik - Wiadomości Hutnicze</i> , 2016, 1, 20-22. | 0.0 | 1 |
| 477 | Investigation of Deformation Mechanisms in an Austenitic Mn-Steel by means of Scanning Electron Microscopy and Electron Backscatter Diffraction. <i>Praktische Metallographie/Practical Metallography</i> , 2019, 56, 393-403. | 0.1 | 0 |
| 478 | Effect of solid-solution strengthening on deformation mechanisms and strain hardening in medium-entropy V1-Cr CoNi alloys. <i>Journal of Materials Science and Technology</i> , 2022, 108, 270-280. | 5.6 | 30 |
| 479 | Manganese effect on the microstructural transformation and mechanical properties of oxide dispersion strengthened steels fabricated with pre-alloyed powders. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 830, 142282. | 2.6 | 4 |
| 480 | Low-Density Steels. , 2021, , 211-289. | | 0 |
| 481 | Synergetic strengthening and deformation mechanisms in gradient Al0.1CoCrFeNi high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 829, 142165. | 2.6 | 7 |
| 482 | Advanced High-Strength Steels. <i>Springer Series in Materials Science</i> , 2020, , 71-98. | 0.4 | 2 |
| 483 | Effects of constrained groove pressing on mechanical properties of a TWIP steel. <i>Materials Science and Technology</i> , 2021, 37, 1291-1301. | 0.8 | 5 |
| 484 | Influences of carbon concentration on microstructure and tensile properties of Fe-18Mn-9Cr-2Al-xC steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 830, 142289. | 2.6 | 2 |
| 485 | Fine structure characterization of an explosively-welded GH3535/316H bimetallic plate interface. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2021, 28, 1811-1820. | 2.4 | 2 |
| 486 | Temperature-dependent universal dislocation structures and transition of plasticity enhancing mechanisms of the Fe40Mn40Co10Cr10 high entropy alloy. <i>International Journal of Plasticity</i> , 2022, 148, 103148. | 4.1 | 30 |
| 487 | Al ₂ O ₃ nanoparticle reinforced heterogeneous CrCoNi-matrix composites with improved strength-ductility synergy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 832, 142398. | 2.6 | 4 |
| 488 | Effects of cerium addition on the microstructure, mechanical properties and strain hardening behavior of TWIP steel Fe-18Mn-0.6C. <i>Materials Characterization</i> , 2022, 183, 111626. | 1.9 | 10 |
| 489 | Dynamic tensile mechanisms and constitutive relationship in CrFeNi medium entropy alloys at room and cryogenic temperatures. <i>Physical Review Materials</i> , 2021, 5, . | 0.9 | 10 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 490 | Recent Progress in Understanding the Nano/Micro-Mechanical Behavior of Austenite in Advanced High Strength Steels. <i>Metals</i> , 2021, 11, 1927. | 1.0 | 0 |
| 491 | Influence of carbon addition on mechanical properties of Fe-Mn-C twinning-induced plasticity steels. <i>Journal of Iron and Steel Research International</i> , 2022, 29, 1446-1454. | 1.4 | 4 |
| 492 | Mechanical Behavior of High-Entropy Alloys: A Review. , 2021, , 435-522. | | 9 |
| 493 | Deformation behaviour of TWIP steels: Constitutive modelling informed by local and integral experimental methods used in concert. <i>Materials Characterization</i> , 2022, 184, 111667. | 1.9 | 9 |
| 494 | Strengthening contributions of dislocations and twins in warm-rolled TWIP steels. <i>International Journal of Plasticity</i> , 2022, 150, 103198. | 4.1 | 35 |
| 495 | Characterization of the microstructure and mechanical properties of highly textured and single crystal Hastelloy X thin struts fabricated by laser powder bed fusion. <i>Journal of Alloys and Compounds</i> , 2022, 901, 163465. | 2.8 | 9 |
| 496 | Low-Carbon Steels. , 2015, , 233-275. | | 0 |
| 497 | Molecular Dynamics Study on the Strengthening Mechanisms of Cr-Fe-Co-Ni High-Entropy Alloys Based on the Generalized Stacking Fault Energy. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 0 |
| 498 | Newer insights into the discrimination of pole mechanisms of twinning in a face-centered cubic high-Mn steel. <i>Materialia</i> , 2022, 21, 101349. | 1.3 | 3 |
| 499 | Microstructure evolution of additively manufactured CoCrFeNiAl _{0.4} high-entropy alloy under thermo-mechanical processing. <i>Journal of Materials Research and Technology</i> , 2022, 16, 442-450. | 2.6 | 9 |
| 500 | Mechanical Properties and Deformation Mechanisms of Heterostructured High-Entropy and Medium-Entropy Alloys: A Review. <i>Frontiers in Materials</i> , 2022, 8, . | 1.2 | 25 |
| 501 | Strain rate effects on mechanical behavior and microstructure evolution with the sequential strains of TWIP steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 835, 142673. | 2.6 | 19 |
| 502 | In-situ tensile and fatigue behavior of electrical grade Cu alloy for subsea cables. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 835, 142654. | 2.6 | 4 |
| 503 | Chemical composition dependence of the strength and ductility enhancement by solute hydrogen in Fe-Cr-Ni-based austenitic alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 836, 142681. | 2.6 | 6 |
| 504 | Enhanced strength-ductility synergy via novel bifunctional nano-precipitates in a high-entropy alloy. <i>International Journal of Plasticity</i> , 2022, 153, 103235. | 4.1 | 56 |
| 505 | Laser-equipped gas reaction chamber for probing environmentally sensitive materials at near atomic scale. <i>PLoS ONE</i> , 2022, 17, e0262543. | 1.1 | 7 |
| 506 | Molecular dynamics study on the strengthening mechanisms of Cr-Fe-Co-Ni high-entropy alloys based on the generalized stacking fault energy. <i>Journal of Alloys and Compounds</i> , 2022, 905, 164137. | 2.8 | 37 |
| 507 | Strain hardening engineering via grain size control in laser powder-bed fusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 838, 142773. | 2.6 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 508 | Robust mechanical properties and corrosion resistance of new low-cost hot-forged and aged $\text{Ti}^{14}\text{Mn}^x\text{Zr}$ alloys. Journal of Alloys and Compounds, 2022, 904, 164098. | 2.8 | 7 |
| 509 | New Comprehension on the Microstructure, Texture and Deformation Behaviors of Uns S32101 Fabricated by Direct Cold Rolling Process. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 510 | Microstructural Features and Mechanical Behaviors of Al _{0.5} Cr _{0.8} CoFeNi _{2.5} V _{0.2} High-Entropy Alloys Fabricated by Selective Laser Melting Technique. Acta Metallurgica Sinica (English Letters), 2022, 35, 1591-1606. | 1.5 | 6 |
| 511 | Dynamic and Static Strain Aging in a High-Manganese Steel. Steel Research International, 2022, 93, . | 1.0 | 3 |
| 512 | Hydrogen and deuterium charging of lifted-out specimens for atom probe tomography. Open Research Europe, 0, 1, 122. | 2.0 | 6 |
| 513 | Effect of Caliber Rolling Temperatures on Microstructure Evolution and Mechanical Properties of High-Mn Steels. Steel Research International, 2022, 93, . | 1.0 | 0 |
| 514 | High-entropy alloys: a review of mechanical properties and deformation mechanisms at cryogenic temperatures. Journal of Materials Science, 2022, 57, 6573-6606. | 1.7 | 40 |
| 515 | Multiple minor elements improve strength-ductility synergy of a high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 840, 142901. | 2.6 | 11 |
| 516 | Effect of Rolling Temperature on Microstructural Characteristics and Deformation Mechanisms of a Metastable Austenitic Stainless Steel. Steel Research International, 0, , . | 1.0 | 1 |
| 517 | Mechanical behavior of thin CoCrFeNi high-entropy alloy sheet under laser shock peening. Intermetallics, 2022, 144, 107529. | 1.8 | 11 |
| 518 | Achieving maximum strength-ductility combination in fine-grained Cu-Zn alloy via detwinning and twinning deformation mechanisms. Journal of Alloys and Compounds, 2022, 906, 164401. | 2.8 | 14 |
| 519 | Non-monotonous effect of pre-strain on the precipitates and strengthening mechanisms of high-entropy alloys. Journal of Alloys and Compounds, 2022, 906, 164338. | 2.8 | 5 |
| 520 | Unveiling the precipitation behavior and mechanical properties of Co-free Ni ₄₇ -Fe ₃₀ Cr ₁₂ Mn ₈ Al Ti ₃ high-entropy alloys. Journal of Materials Science and Technology, 2022, 118, 25-34. | 5.6 | 27 |
| 521 | Dynamically reversible shear transformations in a CrMnFeCoNi high-entropy alloy at cryogenic temperature. Acta Materialia, 2022, 232, 117937. | 3.8 | 24 |
| 522 | Assessment of meta-atom scheme for nucleation of dislocation loops in TWIP steel. Computational Materials Science, 2022, 209, 111430. | 1.4 | 1 |
| 523 | Twin mechanical metamaterials inspired by nano-twin metals: Experimental investigations. Composite Structures, 2022, 291, 115580. | 3.1 | 5 |
| 524 | Microstructure and Mechanical Properties of a Gas-Tungsten-Arc Welded High-Manganese Steel Pipe Using a Welding Wire. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 525 | Stacking Faults or Twins Mediated Deformation Behavior in a Precipitation-Hardening Ni Base Alloy with Heterogeneous Structures. SSRN Electronic Journal, 0, , . | 0.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 526 | Effect of Ti Addition on the Damping and Mechanical Properties of Solid-Solution FeCrNi Alloys. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 527 | Reverse Transformation in [110]-Oriented Face-Centered-Cubic Single Crystals Studied by Atomic Simulations. Acta Metallurgica Sinica (English Letters), 2022, 35, 1631-1640. | 1.5 | 2 |
| 528 | Roles of Mn content and nanovoid defects in the plastic deformation mechanism of Fe-Mn twin crystals from molecular dynamics simulations. Journal of Materials Research, 0, , . | 1.2 | 1 |
| 529 | Influence of cold deformation on microstructure, crystallographic orientation and tensile properties of an experimental austenitic Fe-26Mn-0.4C steel. Journal of Materials Research and Technology, 2022, 19, 7-19. | 2.6 | 10 |
| 530 | Fe55Co17.5Ni10Cr12.5Mo5 High-Entropy Alloy with Outstanding Cryogenic Mechanical Properties Driven by Deformation-Induced Phase Transformation Behavior. Metals and Materials International, 2023, 29, 95-107. | 1.8 | 12 |
| 531 | The effects of post weld heat treatment for welded high-Mn austenitic steels using the submerged arc welding method. Journal of Materials Research and Technology, 2022, 18, 4497-4512. | 2.6 | 15 |
| 532 | New comprehension on the microstructure, texture and deformation behaviors of UNS S32101 duplex stainless steel fabricated by direct cold rolling process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 845, 143150. | 2.6 | 9 |
| 533 | Superb strengthening behavior in a precipitation strengthened Co-rich CoCrNiAlTi medium entropy alloy with acceptable ductility. Intermetallics, 2022, 146, 107582. | 1.8 | 7 |
| 534 | Hydrogen-assisted failure in partially recrystallized carbon alloyed equiatomic CoCrFeMnNi high-entropy alloy. Corrosion Science, 2022, 203, 110357. | 3.0 | 8 |
| 535 | Enhanced dynamic deformability and strengthening effect via twinning and microbanding in high density NiCoFeCrMoW high-entropy alloys. Journal of Materials Science and Technology, 2022, 127, 164-176. | 5.6 | 27 |
| 536 | Orientation Dependent Twinning Behavior in a Twinning-induced Plasticity Steel Investigated by Nanoindentation. Metals and Materials International, 0, , . | 1.8 | 1 |
| 537 | Microstructure evolution, mechanical properties, and corrosion behavior of novel (50Zr-50Ti)-xNi ternary alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 846, 143308. | 2.6 | 4 |
| 538 | Dynamically compressive behaviors and plastic mechanisms of a CrCoNi medium entropy alloy at various temperatures. Acta Mechanica Sinica/Lixue Xuebao, 2022, 38, . | 1.5 | 4 |
| 539 | Temperature-dependent microstructural evolutions and deformation mechanisms of (Ni2Co2FeCr)92Al4Nb4 high-entropy alloys. Journal of Alloys and Compounds, 2022, 918, 165597. | 2.8 | 10 |
| 540 | Effect of Tempering on the Stability of Retained Austenite in Carbide-Free Bainitic Steel. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 541 | Effect of Aluminum Content on the Dynamic Recrystallization of Fe18MnxAl0.74C Steels During Hot-Forging Treatments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 2961-2976. | 1.1 | 7 |
| 542 | Impact of interstitial elements on the stacking fault energy of an equiatomic CoCrNi medium entropy alloy: theory and experiments. Science and Technology of Advanced Materials, 2022, 23, 376-392. | 2.8 | 7 |
| 543 | Influence of microstructural deformation mechanisms and shear strain localisations on small fatigue crack growth in ferritic stainless steel. International Journal of Fatigue, 2022, 163, 107024. | 2.8 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 544 | Microstructures and Deformation Mechanisms of FCC-Phase High-Entropy Alloys. , 0, , . | | 0 |
| 545 | Microstructures and deformation mechanisms of the medium-entropy alloy (NiCoCr) ₇₆ (Ni ₆ AlTi) ₃ . Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 849, 143449. | 2.6 | 8 |
| 546 | Grain size and temperature mediated twinning ability and strength-ductility correlation in pure titanium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 849, 143461. | 2.6 | 10 |
| 547 | Dependence of tensile deformation of twinning-induced plasticity steel on temperature. Materials Letters, 2022, 324, 132712. | 1.3 | 1 |
| 548 | Assisting Excellent Strength-Ductility Balance By Engineering Stacking Faults in V _{0.5} Cr _{0.5} CoNi Medium-Entropy Alloy. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 549 | Significantly Enhanced Strength of a Drawn Twining-Induced Plasticity Steel Wire and its Deformation Twining Dependency. Journal of Materials Engineering and Performance, 2023, 32, 117-134. | 1.2 | 1 |
| 550 | Martensite transformation behavior and mechanical properties of two kinds of low-nickel austenite stainless steel. Materialwissenschaft Und Werkstofftechnik, 2022, 53, 808-818. | 0.5 | 0 |
| 551 | Dynamic recrystallization, Laves phase evolution and mechanical performance of nuclear-grade Nb containing FeCrAl alloy joints fabricated by friction stir welding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 857, 143575. | 2.6 | 10 |
| 552 | Effect of laser shock peening on tensile properties and microstructure of selective laser melted 316L stainless steel with different build directions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 850, 143567. | 2.6 | 17 |
| 553 | Heterostructured stainless steel: Properties, current trends, and future perspectives. Materials Science and Engineering Reports, 2022, 150, 100691. | 14.8 | 65 |
| 554 | Effect of tempering on the stability of retained austenite in carbide-free bainitic steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 850, 143525. | 2.6 | 12 |
| 555 | Modelling of the intergranular fracture of TWIP steels working at high temperature by using CZM CPFE method. International Journal of Plasticity, 2022, 156, 103366. | 4.1 | 13 |
| 556 | Ultra-high strength assisted by nano-precipitates in a heterostructural high-entropy alloy. Journal of Alloys and Compounds, 2022, 921, 166106. | 2.8 | 11 |
| 557 | Effect of Ti addition on the damping and mechanical properties of solid-solution FeCrCoNi alloys. Journal of Alloys and Compounds, 2022, 921, 166060. | 2.8 | 3 |
| 558 | Strengthening and deformation mechanism of high-strength CrMnFeCoNi high entropy alloy prepared by powder metallurgy. Journal of Materials Science and Technology, 2023, 132, 119-131. | 5.6 | 25 |
| 559 | Microstructure evolution and fracture behaviour of TWIP steel under dynamic loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 851, 143657. | 2.6 | 16 |
| 560 | Revealing effect of aluminum alloying on work hardening and impact behaviors of low-density Fe-18Mn-1.3C-2Cr-(4, 11)Al casting steel. China Foundry, 2022, 19, 359-368. | 0.5 | 1 |
| 561 | Tensile deformation-induced twinning in an austenitic low density steel over a wide range of temperature. IOP Conference Series: Materials Science and Engineering, 2022, 1249, 012011. | 0.3 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 562 | Factors Affecting the Mechanical Performance of High Manganese Austenitic Steel. <i>Metals</i> , 2022, 12, 1405. | 1.0 | 1 |
| 563 | Influence of Hatch Strategy on Crystallographic Texture Evolution, Mechanical Anisotropy of Laser Beam Powder Bed Fused S316L Steel. <i>Advanced Engineering Materials</i> , 0, , 2200524. | 1.6 | 0 |
| 564 | Microstructural Evolution, Mechanical Properties, and Corrosion Behavior of an Al _{7.5} Co _{20.5} Fe ₂₄ Ni ₂₄ Cr ₂₄ High-Entropy Alloy. <i>Advanced Engineering Materials</i> , 0, , 2200780. | 1.6 | 2 |
| 565 | The Competition Between Deformation Twinning and Dislocation Slip in Deformed Face-Centered Cubic Metals. <i>Jom</i> , 2022, 74, 3799-3810. | 0.9 | 3 |
| 566 | Synergistic effect of precipitation strengthening and multi-heterostructure on the improvement of strength and ductility in NbC-reinforced FeMnCoCr high entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 853, 143679. | 2.6 | 7 |
| 567 | Low-cycle fatigue behavior and surface treatment of a twinning-induced plasticity high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 853, 143724. | 2.6 | 8 |
| 568 | The effect of Si addition on the heterogeneous grain structure and mechanical properties of CrCoNi medium entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 852, 143655. | 2.6 | 10 |
| 569 | Designing nanoparticles-strengthened high-entropy alloys with simultaneously enhanced strength-ductility synergy at both room and elevated temperatures. <i>Acta Materialia</i> , 2022, 238, 118216. | 3.8 | 37 |
| 570 | Correlation between microstructural heterogeneity and anisotropy of mechanical properties of laser powder bed fused CoCrFeMnNi high entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 855, 143920. | 2.6 | 7 |
| 571 | Microstructure evolution and constitutive modeling for mesoscaled tension of pure titanium thin sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 855, 143905. | 2.6 | 1 |
| 572 | Analysis of strain hardening behavior of a high-Mn TWIP steel using electron microscopy and cyclic stress relaxation. <i>Acta Materialia</i> , 2022, 240, 118309. | 3.8 | 8 |
| 573 | Role of Strain Rate in Phase Stability and Deformation Mechanism of Non-Equiatomic Fe ₃₈ X _{mn} 30 _{co} 15 _{cr} 15 _{ni} 2 _{gdx} High-Entropy Alloy. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 0 |
| 574 | Influence of the loading rate of force on the formation of deformation twins in martensitic stainless steel under repetitive loading-unloading process. <i>International Journal of Fatigue</i> , 2023, 166, 107293. | 2.8 | 0 |
| 575 | Revealing ductile-to-brittle transition mechanism and enhancing the cryogenic ductility of tin (Sn) for cryogenic electronics. , 2022, , . | | 0 |
| 576 | Influence of deformation degree at cold drawing on structure-properties relationship of a Fe-Ni-Cr superalloy. <i>Journal of Alloys and Compounds</i> , 2023, 930, 167407. | 2.8 | 4 |
| 577 | Design metastability in high-entropy alloys by tailoring unstable fault energies. <i>Science Advances</i> , 2022, 8, . | 4.7 | 14 |
| 578 | Controlling Mechanical Behavior of TWIP Steels by Tuning Texture and Stacking Faults. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2022, 53, 3986-4003. | 1.1 | 4 |
| 579 | In-situ study of tensile deformation behaviour of medium Mn TWIP/TRIP steel using synchrotron radiation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 857, 144013. | 2.6 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 580 | Role of strain rate in phase stability and deformation mechanism of non-equiatomic Fe38-xMn30Co15Cr15Ni2Gdx high-entropy alloy. <i>Materials Characterization</i> , 2022, 194, 112356. | 1.9 | 3 |
| 581 | Excellent tensile properties and deformation mechanisms in a FeCoNi-based medium entropy alloy with dual-heterogeneous structures. <i>Journal of Applied Physics</i> , 2022, 132, . | 1.1 | 4 |
| 582 | Interstitial-driven local chemical order enables ultrastrong face-centered cubic multicomponent alloys. <i>Acta Materialia</i> , 2023, 243, 118495. | 3.8 | 17 |
| 583 | Work hardening behavior and substructure evolution of a low-density steel during compressive deformation. <i>Journal of Materials Research and Technology</i> , 2022, 21, 4200-4211. | 2.6 | 4 |
| 584 | Microstructure and mechanical properties of a gas-tungsten-arc-welded Fe-24Mn-3.5Cr-0.4C high manganese steel pipe using a Fe-22Mn-2.34Ni-0.38C welding wire. <i>Materials Characterization</i> , 2022, 194, 112469. | 1.9 | 6 |
| 585 | Insight into microstructure, microhardness and corrosion performance of 2205 duplex stainless steel: Effect of plastic pre-strain. <i>Corrosion Science</i> , 2023, 210, 110847. | 3.0 | 10 |
| 586 | Another reason for plasticity enhancement of cold-deformed aluminium alloy induced by electric pulse treatment. <i>Materials Today Communications</i> , 2023, 34, 104969. | 0.9 | 1 |
| 587 | Experimental investigation of dislocation-grain boundary interaction in coarse-grained high-manganese steels using quasi in situ electron channelling contrast imaging. <i>Materials Characterization</i> , 2023, 195, 112545. | 1.9 | 10 |
| 588 | Phase transformation, precipitation hardening, hetero-deformation induced hardening and deformation mechanisms in a Nb-alloyed medium-entropy alloy. <i>Materials and Design</i> , 2023, 225, 111477. | 3.3 | 5 |
| 589 | Hot deformation behavior of a cryogenic high manganese steel based on the microstructure and texture evolution. <i>Materials Characterization</i> , 2023, 195, 112554. | 1.9 | 1 |
| 590 | Effects of chemical segregation on ductility-anisotropy in high strength Fe-Mn-Al-C lightweight austenitic steels. <i>Acta Materialia</i> , 2023, 245, 118589. | 3.8 | 5 |
| 591 | In-situ TEM investigation of deformation mechanisms of twinning-induced plasticity steel. <i>Materials Characterization</i> , 2023, 196, 112583. | 1.9 | 3 |
| 592 | Lamellar-structured low-cost FeMn0.7Ni0.6Cr0.4Al0.3 high entropy alloy with excellent tensile properties. <i>Vacuum</i> , 2023, 209, 111767. | 1.6 | 4 |
| 593 | Kinematical barriers enhanced dislocation strengthening mechanisms in cold-worked austenitic steels. <i>Scripta Materialia</i> , 2023, 226, 115237. | 2.6 | 6 |
| 594 | Effect of aging temperature on microstructure and mechanical properties of laser melted and hot isostatically pressed (CoCrFeMnNi)96(TiAl)4 alloy. <i>Journal of Alloys and Compounds</i> , 2023, 936, 168317. | 2.8 | 5 |
| 595 | Ballistic impact response of Fe40Mn20Cr20Ni20 high-entropy alloys. <i>Journal of Applied Physics</i> , 2022, 132, . | 1.1 | 10 |
| 596 | Hydrogen-prompted heterogeneous development of dislocation structure in Ni. <i>Acta Materialia</i> , 2023, 246, 118660. | 3.8 | 4 |
| 597 | Effect of Grain Size on the Plastic Deformation Behaviors of a Fe-18Mn-1.3Al-0.6C Austenitic Steel. <i>Materials</i> , 2022, 15, 8717. | 1.3 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 598 | The effect of niobium element on the tensile behavior in GH3535 alloy at room temperature and 750°C. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 861, 144401. | 2.6 | 9 |
| 599 | Effects of strain rate on tensile ductility in Cu-added stable Fe-Cr-Ni-based austenitic stainless steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 861, 144415. | 2.6 | 3 |
| 600 | Enhanced mechanical performance of gradient-structured CoCrFeMnNi high-entropy alloys induced by industrial shot-blasting. <i>Rare Metals</i> , 2023, 42, 982-993. | 3.6 | 2 |
| 601 | Phase Stability and Deformation Modes in Functionally Graded Metastable Austenitic Stainless Steel; A Novel Approach to Evaluate the Role of Nitrogen. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2023, 54, 590-604. | 1.1 | 2 |
| 602 | Physical metallurgy of medium-Mn advanced high-strength steels. <i>International Materials Reviews</i> , 2023, 68, 786-824. | 9.4 | 10 |
| 603 | Revealing the grain size-dependent twinning variants and the associated strengthening mechanisms in a carbon-free austenitic steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2023, 864, 144577. | 2.6 | 2 |
| 604 | Hydrogen induced microstructure, mechanical properties and cracking evolution in a novel CoCrNiMo medium-entropy alloy. <i>Journal of Alloys and Compounds</i> , 2023, 939, 168790. | 2.8 | 4 |
| 605 | Dislocation behavior in initial stage of plastic deformation for CoCrNi medium entropy alloy. <i>Journal of Alloys and Compounds</i> , 2023, 943, 169057. | 2.8 | 3 |
| 606 | Dependence of Charpy Impact Properties of Fe-30Mn-0.05C Steel on Microstructure. <i>Crystals</i> , 2023, 13, 353. | 1.0 | 2 |
| 607 | The excellent strength and ductility matching of directly warm-rolled V-alloyed medium manganese steel by stacking fault networks. <i>Materials and Design</i> , 2023, 227, 111719. | 3.3 | 8 |
| 608 | Unusual grain-size effects on tensile deformation behavior of twinning-induced plasticity steel with low Mn content. <i>Journal of Materials Research and Technology</i> , 2023, 24, 586-594. | 2.6 | 1 |
| 609 | Procedures for microstructurally conditioning an Fe-22Mn-0.6C-1.5Al TWIP steel for optimal mechanical behaviour. <i>Materials Characterization</i> , 2023, 199, 112790. | 1.9 | 3 |
| 610 | Effects of laser powder bed fusion process parameters on microstructure and hydrogen embrittlement of high-entropy alloy. <i>Journal of Materials Science and Technology</i> , 2023, 155, 211-226. | 5.6 | 3 |
| 611 | Excellent mechanical properties of CoNiCr-based MP159 multicomponent alloys at ambient and cryogenic temperatures. <i>Intermetallics</i> , 2023, 155, 107836. | 1.8 | 2 |
| 612 | Effect of ECAP processing temperature on an austenitic TWIP steel's microstructure, texture and mechanical properties. <i>Journal of Materials Research and Technology</i> , 2023, 24, 1757-1775. | 2.6 | 6 |
| 613 | Micromechanical origin for the wide range of strength-ductility trade-off in metastable high entropy alloys. <i>Scripta Materialia</i> , 2023, 231, 115439. | 2.6 | 5 |
| 614 | Tensile deformation of NiTi shape memory alloy thermally loaded under applied stress. <i>Materials and Design</i> , 2023, 226, 111638. | 3.3 | 9 |
| 615 | Limitations of meta-atom potential for analyzing dislocation core structure in TWIP steel. <i>Mechanics of Materials</i> , 2023, 178, 104563. | 1.7 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 616 | Enhanced strengthening effect via nano-twinning in cryo-rolled FeCoCrNiMo0.2 high-entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2023, 866, 144676. | 2.6 | 8 |
| 617 | Achievement of grain boundary engineering by transforming residual stress in selective laser-melted Inconel 718 superalloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2023, 866, 144683. | 2.6 | 2 |
| 618 | Enhanced mechanical properties of a Ni-W-Al alloy in the as-cast state. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2023, 866, 144686. | 2.6 | 1 |
| 619 | The effect of Si addition on the structure and mechanical properties of equiatomic CoCrFeMnNi high entropy alloy by experiment and simulation. <i>Materialia</i> , 2023, 27, 101707. | 1.3 | 5 |
| 620 | Microstructure and Mechanical Properties of Biomedical Ti-Zr-Nb-Ta-Sn High-Entropy Alloys. <i>Metals</i> , 2023, 13, 353. | 1.0 | 4 |
| 621 | Ductilizing Al-Mn strips via gradient texture. <i>Materials Research Letters</i> , 2023, 11, 430-438. | 4.1 | 6 |
| 622 | Gradient Microstructure and Texture Formation in a Metastable Austenitic Stainless Steel during Cold Rotary Swaging. <i>Materials</i> , 2023, 16, 1706. | 1.3 | 8 |
| 623 | Effect of the Dislocation Substructure Parameters of Hadfield Steel on Its Strain Hardening. <i>Materials</i> , 2023, 16, 1717. | 1.3 | 0 |
| 624 | Effect of Surface Impacting Parameters on Wear Resistance of High Manganese Steel. <i>Coatings</i> , 2023, 13, 539. | 1.2 | 1 |
| 625 | Outstanding strength-ductility synergy in Inconel 718 superalloy via laser powder bed fusion and thermomechanical treatment. <i>Additive Manufacturing</i> , 2023, 67, 103491. | 1.7 | 3 |
| 626 | Enhanced Mechanical and Corrosion Properties via Annealing Treatment on the Hot-Rolled Ti-Zr-Mo Alloy. <i>Materials</i> , 2023, 16, 2597. | 1.3 | 1 |
| 627 | On the faulting and twinning mediated strengthening and plasticity in a γ -strengthened CoNi-based superalloy at room temperature. <i>Acta Materialia</i> , 2023, 252, 118928. | 3.8 | 6 |
| 628 | Microstructural evolution and tensile property of gradient microstructure CoCrFeMnNi high-entropy alloy induced by pre-torsion. <i>Journal of Alloys and Compounds</i> , 2023, 955, 170053. | 2.8 | 2 |
| 629 | Hydrogen-induced hardening of a high-manganese twinning induced plasticity steel. <i>Materialia</i> , 2023, 28, 101776. | 1.3 | 4 |
| 680 | High Strength Steels. <i>Topics in Mining, Metallurgy and Materials Engineering</i> , 2024, , 31-60. | 1.4 | 0 |