

Qing Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7262006/publications.pdf>

Version: 2024-02-01

167
papers

6,936
citations

66343

42
h-index

76900

74
g-index

167
all docs

167
docs citations

167
times ranked

3193
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Hall-Petch relationship in Mg alloys: A review. <i>Journal of Materials Science and Technology</i> , 2018, 34, 248-256. | 10.7 | 443 |
| 2 | Microstructure and strengthening mechanisms in cold-drawn pearlitic steel wire. <i>Acta Materialia</i> , 2011, 59, 3422-3430. | 7.9 | 275 |
| 3 | The mechanism for the high dependence of the Hall-Petch slope for twinning/slip on texture in Mg alloys. <i>Acta Materialia</i> , 2017, 128, 313-326. | 7.9 | 247 |
| 4 | Strengthening and toughening of magnesium alloy by {10 ⁻¹² } extension twins. <i>Scripta Materialia</i> , 2012, 66, 25-28. | 5.2 | 214 |
| 5 | Improving tensile and compressive properties of magnesium alloy plates by pre-cold rolling. <i>Scripta Materialia</i> , 2012, 66, 1061-1064. | 5.2 | 209 |
| 6 | The structural and compositional evolution of precipitates in Al-Mg-Si-Cu alloy. <i>Acta Materialia</i> , 2018, 145, 437-450. | 7.9 | 197 |
| 7 | Tailoring the texture of magnesium alloy by twinning deformation to improve the rolling capability. <i>Scripta Materialia</i> , 2011, 64, 986-989. | 5.2 | 168 |
| 8 | Effect of crystal orientation on the mechanical properties and strain hardening behavior of magnesium alloy AZ31 during uniaxial compression. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 534, 588-593. | 5.6 | 167 |
| 9 | Geometrically necessary boundaries and incidental dislocation boundaries formed during cold deformation. <i>Scripta Metallurgica Et Materialia</i> , 1995, 32, 1289-1295. | 1.0 | 160 |
| 10 | The natural aging and precipitation hardening behaviour of Al-Mg-Si-Cu alloys with different Mg/Si ratios and Cu additions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 627, 119-126. | 5.6 | 139 |
| 11 | Quantitative prediction of texture effect on Hall-Petch slope for magnesium alloys. <i>Acta Materialia</i> , 2019, 173, 142-152. | 7.9 | 126 |
| 12 | Understanding of variant selection and twin patterns in compressed Mg alloy sheets via combined analysis of Schmid factor and strain compatibility factor. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 609, 92-101. | 5.6 | 124 |
| 13 | Effects of strain rate on flow stress behavior and dynamic recrystallization mechanism of Al-Zn-Mg-Cu aluminum alloy during hot deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 662, 204-213. | 5.6 | 115 |
| 14 | Atomic Pd on Graphdiyne/Graphene Heterostructure as Efficient Catalyst for Aromatic Nitroreduction. <i>Advanced Functional Materials</i> , 2019, 29, 1905423. | 14.9 | 112 |
| 15 | Effect of initial texture on dynamic recrystallization of AZ31 Mg alloy during hot rolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 2941-2951. | 5.6 | 102 |
| 16 | Characteristics of long {10-12} twin bands in sheet rolling of a magnesium alloy. <i>Scripta Materialia</i> , 2014, 74, 96-99. | 5.2 | 102 |
| 17 | Compressive mechanical behavior of Al/Mg composite rods with different types of Al sleeve. <i>Acta Materialia</i> , 2016, 120, 379-390. | 7.9 | 98 |
| 18 | Hot deformation behavior of AA7085 aluminum alloy during isothermal compression at elevated temperature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 596, 176-182. | 5.6 | 93 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Hot deformation and dynamic recrystallization in Al-Mg-Si alloy. <i>Materials Characterization</i> , 2021, 173, 110976. | 4.4 | 83 |
| 20 | Evolution of cementite morphology in pearlitic steel wire during wet wire drawing. <i>Materials Characterization</i> , 2010, 61, 65-72. | 4.4 | 80 |
| 21 | Correlation Between Texture Variation and Transverse Tensile Behavior of Friction-Stir-Processed AZ31 Mg Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 2500-2508. | 2.2 | 73 |
| 22 | Mechanisms of fracture and inhomogeneous deformation on transverse tensile test of friction-stir-processed AZ31 Mg alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 565, 333-341. | 5.6 | 73 |
| 23 | Microstructural and textural evolution of commercially pure Zr sheet rolled at room and liquid nitrogen temperatures. <i>Materials and Design</i> , 2015, 85, 296-308. | 7.0 | 73 |
| 24 | Microstructure and mechanical properties of friction stir welded dissimilar Mg alloys of ZK60&AZ31. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 561, 419-426. | 5.6 | 69 |
| 25 | Microstructure evolution and static recrystallization during hot rolling and annealing of an equiaxed-structure TC21 titanium alloy. <i>Journal of Alloys and Compounds</i> , 2018, 752, 14-22. | 5.5 | 68 |
| 26 | Umpolung Strategy for Synthesis of β^2 -Ketonitriles through Hypervalent Iodine-Promoted Cyanation of Silyl Enol Ethers. <i>Journal of Organic Chemistry</i> , 2015, 80, 7212-7218. | 3.2 | 67 |
| 27 | Changes in texture and microstructure of friction stir welded Mg alloy during post-rolling and their effects on mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 582, 178-187. | 5.6 | 66 |
| 28 | Heterogeneous microstructures and microtextures in cube-oriented Al crystals after channel die compression. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998, 29, 2333-2344. | 2.2 | 64 |
| 29 | Improving the room temperature stretch formability of a Mg alloy thin sheet by pre-twinning. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 655, 1-8. | 5.6 | 64 |
| 30 | Crystallographic orientation dependent crack nucleation during the compression of a Widmannstätten-structure β^2/β^1 titanium alloy. <i>Scripta Materialia</i> , 2018, 156, 110-114. | 5.2 | 62 |
| 31 | Geometrical compatibility factor analysis of paired extension twins in extruded Mg&3Al&1Zn alloys. <i>Materials and Design</i> , 2015, 86, 656-663. | 7.0 | 60 |
| 32 | Improving tensile and compressive properties of magnesium alloy rods via a simple pre-torsion deformation. <i>Materials and Design</i> , 2015, 83, 270-275. | 7.0 | 59 |
| 33 | Controlling the recrystallization behavior of a Mg&3Al&1Zn alloy containing extension twins. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 622, 178-183. | 5.6 | 59 |
| 34 | Effect of dislocation-twin boundary interaction on deformation by twin boundary migration. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 662, 95-99. | 5.6 | 58 |
| 35 | Hot deformation behavior and microstructure of AA2195 alloy under plane strain compression. <i>Materials Characterization</i> , 2017, 131, 500-507. | 4.4 | 55 |
| 36 | The influence of a secondary twin on the detwinning deformation of a primary twin in Mg&3Al&1Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 606, 81-91. | 5.6 | 54 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Strain compatibility effect on the variant selection of connected twins in magnesium. <i>Materials & Design</i> , 2015, 76, 71-76. | 5.1 | 54 |
| 38 | {10-12} Twin variants selection mechanisms during twinning, re-twinning and detwinning. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 612, 431-439. | 5.6 | 52 |
| 39 | Enhancing stretch formability of rolled Mg sheets by pre-inducing contraction twins and recrystallization annealing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 627, 369-373. | 5.6 | 50 |
| 40 | Optimization of the pre-aging treatment for an AA6022 alloy at various temperatures and holding times. <i>Journal of Alloys and Compounds</i> , 2015, 647, 238-244. | 5.5 | 47 |
| 41 | Microstructure, texture and mechanical properties of commercial high-purity thick titanium plates joined by electron beam welding. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 677, 50-57. | 5.6 | 47 |
| 42 | The mechanism of twinning activation and variant selection in magnesium alloys dominated by slip deformation. <i>Journal of Alloys and Compounds</i> , 2016, 687, 352-359. | 5.5 | 46 |
| 43 | Dynamic restoration and deformation heterogeneity during hot deformation of a duplex-structure TC21 titanium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 712, 440-452. | 5.6 | 46 |
| 44 | Effect of initial texture on dynamic recrystallization and deformation mechanisms in AZ31 Mg alloy extruded at 573K. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 569, 18-26. | 5.6 | 42 |
| 45 | Strain localization in friction stir welded magnesium alloy during tension and compression deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 609, 88-91. | 5.6 | 42 |
| 46 | Synthesis of Hydrogen-Substituted Graphyne Film for Lithium-Sulfur Battery Applications. <i>Small</i> , 2019, 15, 1805344. | 10.0 | 42 |
| 47 | Experimental observation of $12\sqrt{3}$ variants inherited from one $\sqrt{3}$ grain in a Zr alloy. <i>Journal of Nuclear Materials</i> , 2013, 440, 377-381. | 2.7 | 41 |
| 48 | Effect of subsequent tension and annealing on microstructure evolution and strength enhancement of friction stir welded Mg alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 602, 1-10. | 5.6 | 40 |
| 49 | Twinning characteristic in tension of magnesium alloys and its effect on mechanical properties. <i>Materials and Design</i> , 2016, 107, 503-510. | 7.0 | 40 |
| 50 | Experimental and numerical investigation of anisotropic and twinning behavior in Mg alloy under uniaxial tension. <i>Materials and Design</i> , 2016, 98, 333-343. | 7.0 | 40 |
| 51 | Understanding common grain boundary twins in Mg alloys by a composite Schmid factor. <i>International Journal of Plasticity</i> , 2019, 123, 208-223. | 8.8 | 40 |
| 52 | Deformation mechanisms and dynamic recrystallization of AZ31 Mg alloy with different initial textures during hot tension. <i>Materials & Design</i> , 2013, 50, 382-391. | 5.1 | 39 |
| 53 | Tailoring the texture and mechanical anisotropy of a Mg-Zn-Gd plate by varying the rolling path. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 653, 93-98. | 5.6 | 39 |
| 54 | Sulfination of alcohols with sodium sulfinates promoted by $\text{BF}_3 \cdot \text{OEt}_2$: an unexpected access. <i>Green Chemistry</i> , 2016, 18, 1874-1879. | 9.0 | 38 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 55 | The different effects of twin boundary and grain boundary on reducing tension-compression yield asymmetry of Mg alloys. <i>Scientific Reports</i> , 2016, 6, 29283. | 3.3 | 36 |
| 56 | Largely alleviating the orientation dependence by sequentially changing strain paths. <i>Materials and Design</i> , 2016, 97, 464-472. https://doi.org/10.1016/j.matdes.2016.03.019 | 7.0 | 36 |
| 57 | alting="si1.svg">$\langle 100 \rangle$ twinning behavior under biaxial tension of Mg$\langle 3Al \rangle$1Zn plate. <i>International Journal of Plasticity</i> , 2020, 133, 102754. | 8.8 | 36 |
| 58 | Twinning characteristic and variant selection in compression of a pre-side-rolled Mg alloy sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 614, 106-115. | 5.6 | 35 |
| 59 | A quantitative study on mechanical behavior of Mg alloys with bimodal texture components. <i>Acta Materialia</i> , 2021, 214, 117013. | 7.9 | 35 |
| 60 | Influence of pre-torsion deformation on microstructures and properties of cold drawing pearlitic steel wires. <i>Materials & Design</i> , 2013, 50, 285-292. | 5.1 | 34 |
| 61 | Microstructure-based modeling of tensile deformation of a friction stir welded AZ31 Mg alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 687, 63-72. | 5.6 | 34 |
| 62 | Variant selection of {10-12}-{10-12} double twins during the tensile deformation of an AZ31 Mg alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 700, 226-233. | 5.6 | 33 |
| 63 | A weak texture dependence of Hall-Petch relation in a rare-earth containing magnesium alloy. <i>Journal of Materials Science and Technology</i> , 2022, 99, 251-259. | 10.7 | 33 |
| 64 | Microstructure and texture evolution in fully pearlitic steel during wire drawing. <i>Science China Technological Sciences</i> , 2013, 56, 1139-1146. | 4.0 | 32 |
| 65 | Effect of Twin Boundary-Dislocation-Solute Interaction on Detwinning in a Mg$\langle 3Al \rangle$1Zn Alloy. <i>Journal of Materials Science and Technology</i> , 2016, 32, 1239-1244. | 10.7 | 32 |
| 66 | Iron-catalysed sequential reaction towards α -aminonitriles from secondary amines, primary alcohols and trimethylsilyl cyanide. <i>Chemical Communications</i> , 2016, 52, 2776-2779. | 4.1 | 32 |
| 67 | Quasi-in-situ analysis of dependency of deformation mechanism and work-hardening behavior on texture in Mg-2Zn-0.1Ca alloy. <i>Journal of Alloys and Compounds</i> , 2019, 784, 1187-1197. | 5.5 | 31 |
| 68 | The activation of twinning and texture evolution during bending of friction stir welded magnesium alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 646, 145-153. | 5.6 | 30 |
| 69 | The disordered structure of Q ϵ^2 and C phases in Al$\langle Mg \rangle$Si$\langle Cu \rangle$ alloy. <i>Scripta Materialia</i> , 2016, 118, 55-59. | 5.2 | 30 |
| 70 | Effect of initial orientation on dynamic recrystallization of a zirconium alloy during hot deformation. <i>Materials Characterization</i> , 2018, 145, 444-453. | 4.4 | 30 |
| 71 | Influence of rolling ways on microstructure and anisotropy of AZ31 alloy sheet. <i>Transactions of Nonferrous Metals Society of China</i> , 2010, 20, s589-s593. | 4.2 | 28 |
| 72 | The effect of architecture on the mechanical properties of Mg$\langle 3Al \rangle$1Zn Rods Containing Hard Al Alloy Cores. <i>Scripta Materialia</i> , 2015, 98, 56-59. | 5.2 | 28 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Effect of titanium grain orientation on the growth of compounds at diffusion bonded titanium/steel interfaces. <i>Materials Characterization</i> , 2019, 148, 243-251. | 4.4 | 28 |
| 74 | Ex-situ study on mechanical properties and deformation mechanism of three typical microstructures in TA19 titanium alloy. <i>Materials Characterization</i> , 2020, 167, 110521. | 4.4 | 28 |
| 75 | The mechanism for an orientation dependence of grain boundary strengthening in pure titanium. <i>International Journal of Plasticity</i> , 2022, 153, 103276. | 8.8 | 28 |
| 76 | Evolution mechanisms of the primary β and β' phases during β/β' deformation of an β/β' titanium alloy TC8. <i>Materials Characterization</i> , 2016, 120, 115-123. | 4.4 | 27 |
| 77 | Effect of cooling rate on $\beta \rightarrow \beta'$ transformation during quenching of a Zr-0.85Sn-0.4Nb-0.4Fe-0.1Cr-0.05Cu alloy. <i>Science China Technological Sciences</i> , 2012, 55, 2960-2964. | 4.0 | 26 |
| 78 | The different hardening effects of tension twins on basal slip and prismatic slip in Mg alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 700, 695-700. | 5.6 | 26 |
| 79 | The different effects of solute segregation at twin boundaries on mechanical behaviors of twinning and detwinning. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 644, 365-373. | 5.6 | 25 |
| 80 | Influence of pre-recovery on the subsequent recrystallization and mechanical properties of a twin-roll cast Al-Mn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 682, 63-72. | 5.6 | 25 |
| 81 | Effect of Heat Treatment Condition on the Flow Behavior and Recrystallization Mechanisms of Aluminum Alloy 7055. <i>Materials</i> , 2019, 12, 311. | 2.9 | 25 |
| 82 | A comparative study between uniaxial compression and plane strain compression of Mg-3Al-1Zn alloy using experiments and simulations. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 597, 349-358. | 5.6 | 24 |
| 83 | The role of dislocations in strain hardening of an extension twinning predominant deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 636, 389-395. | 5.6 | 24 |
| 84 | A new annealing hardening mechanism in pre-twinned Mg-3Al-1Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 654, 344-351. | 5.6 | 24 |
| 85 | Solute atom mediated Hall-Petch relations for magnesium binary alloys. <i>Scripta Materialia</i> , 2022, 210, 114451. | 5.2 | 24 |
| 86 | Plastic deformation behavior of AZ31 magnesium alloy under multiple passes cross compression. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 532, 50-57. | 5.6 | 22 |
| 87 | Influence of Torsion Deformation on Textures of Cold Drawing Pearlitic Steel Wires. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015, 28, 707-714. | 2.9 | 22 |
| 88 | Crystallographic analysis on the activation of multiple twins in rolled AZ31 Mg alloy sheets during uniaxial and plane strain compression. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 652, 42-50. | 5.6 | 22 |
| 89 | The effect of hot rolling regime on texture and mechanical properties of an as-cast Mg-2Zn-2Gd plate. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 731, 288-295. | 5.6 | 22 |
| 90 | Strain-Path Dependence of $\{10\bar{1}2\}$ Twinning in a Rolled Mg-3Al-1Zn Alloy: Influence of Twinning Model. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 118-131. | 2.2 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 91 | The application of back-scattered electron imaging for characterization of pearlitic steels. <i>Science China Technological Sciences</i> , 2011, 54, 2368-2372. | 4.0 | 21 |
| 92 | Thermal stability of different texture components in extruded Mg-3Al-1Zn alloy. <i>Journal of Magnesium and Alloys</i> , 2019, 7, 577-583. | 11.9 | 21 |
| 93 | Detwinning behavior of Mg-3Al-1Zn alloy at elevated temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 617, 24-30. | 5.6 | 20 |
| 94 | Boron Trifluoride...Diethyl Ether-Catalyzed Etherification of Alcohols: A Metal-Free Pathway to Diphenylmethyl Ethers. <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 3115-3120. | 4.3 | 20 |
| 95 | Obtaining high strength and high plasticity in a Mg-3Al-1Zn plate using pre-tension and annealing treatments. <i>Journal of Alloys and Compounds</i> , 2017, 704, 406-412. | 5.5 | 20 |
| 96 | Effects of asymmetrical rolling on through-thickness microstructure and texture of body-centered cubic (BCC) tantalum. <i>International Journal of Refractory Metals and Hard Materials</i> , 2019, 78, 51-60. | 3.8 | 20 |
| 97 | Microstructure characterization and quasi-static failure behavior of resistance spot welds of AA6111-T4 aluminum alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2014, 24, 3879-3885. | 4.2 | 19 |
| 98 | Influence of observation plane on twin variant identification in magnesium via trace and misorientation analysis. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 618, 558-562. | 5.6 | 19 |
| 99 | Influence of annealing on the microstructure, interfacial compounds and mechanical properties of hot rolling bonded Ti/steel clad plate with bimetallic interlayered steel and vanadium. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 764, 138227. | 5.6 | 19 |
| 100 | On the texture memory effect of a cross-rolled Mg-2Zn-2Gd plate after unidirectional rolling. <i>Journal of Materials Science and Technology</i> , 2020, 41, 98-104. | 10.7 | 19 |
| 101 | Dislocation Boundary Structure from Low to Medium Strain of Cold Rolling AA3104 Aluminum Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 1487-1497. | 2.2 | 18 |
| 102 | Ethers as hydrogen sources in BF ₃ ·OEt ₂ promoted reduction of diphenylmethyl alcohols, ethers and esters to hydrocarbons. <i>RSC Advances</i> , 2015, 5, 85291-85295. | 3.6 | 18 |
| 103 | Inhomogeneous deformation of {111} grain in cold rolled tantalum. <i>Journal of Materials Science and Technology</i> , 2018, 34, 2178-2182. | 10.7 | 18 |
| 104 | The texture dependence of strength in slip and twinning predominant deformations of Mg-3Al-1Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 717, 34-40. | 5.6 | 18 |
| 105 | Quantitative analysis: How annealing temperature influences recrystallization texture and grain shape in tantalum. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 72, 244-252. | 3.8 | 18 |
| 106 | Effect of lamellar structural parameters on the bending fracture behavior of AA1100/AA7075 laminated metal composites. <i>Journal of Materials Science and Technology</i> , 2022, 99, 28-38. | 10.7 | 18 |
| 107 | Observation and analysis of the coexistence of two "opposite" twin modes in a Mg-Al-Zn alloy. <i>Materials and Design</i> , 2016, 102, 196-201. | 7.0 | 17 |
| 108 | Comparative examinations on the activity and variant selection of twinning during tension and compression of magnesium alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 658, 229-237. | 5.6 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Study of the Q ϵ^2 (Q)-phase precipitation in Al-Mg-Si-Cu alloys by quantification of atomic-resolution transmission electron microscopy images and atom probe tomography. <i>Journal of Materials Science</i> , 2019, 54, 7943-7952. | 3.7 | 17 |
| 110 | Effects of annealing on the interface microstructures and mechanical properties of hot roll bonded Ti6Al4V/AA6061 clad sheets. <i>Journal of Materials Research and Technology</i> , 2020, 9, 11813-11825. | 5.8 | 17 |
| 111 | Microstructure and mechanical properties of Ti6Al4V/AA6061/AZ31 laminated metal composites (LMCs) fabricated by hot roll bonding. <i>Journal of Alloys and Compounds</i> , 2021, 861, 157943. | 5.6 | 16 |
| 112 | Thermal stability of extension twins in Mg-3Al-1Zn rods. <i>Journal of Alloys and Compounds</i> , 2017, 696, 428-434. | 5.5 | 15 |
| 113 | Thermo-mechanically affected zone in AA6111 resistance spot welds. <i>Journal of Materials Processing Technology</i> , 2017, 249, 463-470. | 6.3 | 15 |
| 114 | Comparing the Through-Thickness Gradient of the Deformed and Recrystallized Microstructure in Tantalum with Unidirectional and Clock Rolling. <i>Materials</i> , 2019, 12, 169. | 2.9 | 15 |
| 115 | Evolution of interface and collaborative deformation between Ti and steel during hot roll bonding. <i>Materials Characterization</i> , 2020, 164, 110354. | 4.4 | 15 |
| 116 | Microstructure and mechanical properties of Ti6Al4V/AA6061/AZ31 laminated metal composites (LMCs) fabricated by hot roll bonding. <i>Journal of Alloys and Compounds</i> , 2021, 861, 157943. | 5.5 | 15 |
| 117 | Static globularization and grain morphology evolution of β and β' phases during annealing of hot-rolled TC21 titanium alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2021, 31, 2664-2676. | 4.2 | 15 |
| 118 | Pyramidal slips in high cycle fatigue deformation of a rolled Mg-3Al-1Zn magnesium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 699, 247-253. | 5.6 | 15 |
| 119 | EVOLUTIONS OF MICROSTRUCTURE AND FERRITIC MICRO-ORIENTATION AND TEXTURE IN A PEARLITIC STEEL WIRE DURING COLD DRAWING. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2010, 2010, 141-146. | 0.3 | 15 |
| 120 | Electron backscatter diffraction investigation of duplex-phase microstructure in a forged Zr-2.5Nb alloy. <i>Science China Technological Sciences</i> , 2016, 59, 673-679. | 4.0 | 14 |
| 121 | Plastic anisotropy and fracture behavior of AZ31 magnesium alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2011, 21, 880-884. | 4.2 | 13 |
| 122 | Comparative study on twinning characteristics during two post-weld compression paths and their effects on joint enhancement. <i>Scientific Reports</i> , 2016, 6, 39779. | 3.3 | 13 |
| 123 | Varying the strong basal texture in a Mg-3Al-1Zn plate by a new wave-shaped interface rolling. <i>Materials Letters</i> , 2018, 213, 151-153. | 2.6 | 13 |
| 124 | Strain accommodation of β -normal direction-oriented grains in micro-shear bands of high-purity tantalum. <i>Journal of Materials Science</i> , 2018, 53, 12543-12552. | 3.7 | 13 |
| 125 | Enhancing the Mechanical Properties of Hot Roll Bonded Al/Ti Laminated Metal Composites (LMCs) by Pre-Rolling Diffusion Process. <i>Metals</i> , 2019, 9, 795. | 2.3 | 13 |
| 126 | Effect of combined addition of Ag and Cu on the precipitation behavior for an Al-Mg-Si alloy. <i>Materials Characterization</i> , 2021, 171, 110736. | 4.4 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 127 | Study on the compressive deformation behavior of a basal textured AZ31 magnesium alloy from the perspective of local strain. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 842, 143080. | 5.6 | 12 |
| 128 | Influence of extrusion ratio on microstructure and texture developments of high-temperature extruded AZ31 Mg alloy. <i>Science China Technological Sciences</i> , 2012, 55, 490-495. | 4.0 | 11 |
| 129 | Deformation bands in fully pearlitic steel during wire drawing. <i>Science China Technological Sciences</i> , 2014, 57, 796-803. | 4.0 | 10 |
| 130 | Tailoring the Microstructure and Mechanical Property of AZ80 Alloys by Multiple Twinning and Aging Precipitation. <i>Advanced Engineering Materials</i> , 2017, 19, 1700332. | 3.5 | 10 |
| 131 | Effect of intermetallic compounds (IMCs) on the interfacial bonding strength and mechanical properties of pre-rolling diffusion ARBed Al/Ti laminated composites. <i>Materials Characterization</i> , 2020, 170, 110731. | 4.4 | 10 |
| 132 | Effect of Clock Rolling on Microstructures and Properties of AZ31 Magnesium Alloy Sheets. <i>Materials Science Forum</i> , 0, 686, 40-45. | 0.3 | 9 |
| 133 | Simulation of texture evolution and deformation mechanism in Mg-3Al-1Zn alloy during uniaxial compression. <i>Science China Technological Sciences</i> , 2015, 58, 2052-2059. | 4.0 | 9 |
| 134 | Concurrent inheritance of microstructure and texture after slow $\hat{2}\hat{1}\hat{2}$ cooling of commercially pure Zr. <i>Science China Technological Sciences</i> , 2016, 59, 1771-1776. | 4.0 | 9 |
| 135 | Effect of cross rolling on the interface morphology and mechanical properties of ARBed AA1100/AA7075 laminated metal composites. <i>Journal of Alloys and Compounds</i> , 2019, 805, 617-623. | 5.5 | 9 |
| 136 | Deformation and annealing behavior in the \hat{c} -interaction zone TM of cold-rolled tantalum sheets. <i>Vacuum</i> , 2019, 164, 105-113. | 3.5 | 9 |
| 137 | Initial orientation analysis of the contribution of pyramidal $\hat{c}+\hat{a}$ slip to the dynamic recrystallization in a Zr-1Sn-0.3Nb alloy under warm to hot deformation. <i>Journal of Alloys and Compounds</i> , 2019, 787, 318-331. | 5.5 | 9 |
| 138 | Effect of strain path change on the through-thickness microstructure during tantalum rolling. <i>International Journal of Refractory Metals and Hard Materials</i> , 2020, 87, 105168. | 3.8 | 9 |
| 139 | Annealing induced concentration of basal poles toward the normal direction of a hot rolled Mg \hat{c} -5.7Zn plate. <i>Journal of Alloys and Compounds</i> , 2016, 666, 341-345. | 5.5 | 8 |
| 140 | Orientation-dependent grain boundary characteristics in tantalum upon the change of strain path. <i>Materials Characterization</i> , 2019, 154, 277-284. | 4.4 | 8 |
| 141 | Pass number dependence of through-thickness microstructure homogeneity in tantalum sheets under the change of strain path. <i>Materials Characterization</i> , 2020, 160, 110076. | 4.4 | 8 |
| 142 | HETEROGENEOUS MICROSTRUCTURE AND TEXTURE EVOLUTION DURING FABRICATION OF Zr--Sn--Nb ZIRCONIUM ALLOY SHEETS. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2013, 48, 393-400. | 0.3 | 8 |
| 143 | Precise determination of the $\hat{1}\hat{2}\hat{1}+\hat{1}^2$ phase transformation temperature of Zr-1.0Sn-0.3Nb-0.3Fe alloy. <i>Science China Technological Sciences</i> , 2013, 56, 60-65. | 4.0 | 7 |
| 144 | Tailoring the microstructure and mechanical properties of the final Al-Mn foils by different intermediate annealing process. <i>Journal of Materials Science and Technology</i> , 2017, 33, 961-970. | 10.7 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Effect of varying β phase fraction on the mechanical properties and deformation mechanisms in a metastable β -ZrTiAlV alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 772, 138784. | 5.6 | 7 |
| 146 | Through-thickness texture gradient of tantalum sputtering target. <i>Rare Metals</i> , 2017, 36, 523-526. | 7.1 | 6 |
| 147 | Fracture morphology and crack mechanism in pure polycrystalline magnesium under tension-compression fatigue testing. <i>Rare Metals</i> , 2020, 39, 162-168. | 7.1 | 6 |
| 148 | Examination of dynamic recrystallization during compression of AZ31 magnesium. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 176-179. | 0.9 | 5 |
| 149 | Correlation between Flow Behavior and Microstructure Evolution during β/β' Deformation of TA19 Titanium Alloy. <i>Advanced Engineering Materials</i> , 2016, 18, 1808-1815. | 3.5 | 5 |
| 150 | Effect of grain size on β -variant selection in a ZrTiAlV alloy. <i>Science China Technological Sciences</i> , 2019, 62, 982-988. | 4.0 | 5 |
| 151 | Tailoring the microstructure and texture of a dual-phase Mg-8Li alloy by varying the rolling path. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 844, 143202. | 5.6 | 5 |
| 152 | Developing a Basal Texture with Two Peaks Tilting Towards the Transverse Direction in Hot Rolled Mg-5.7Zn-0.5Zr Plates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 4276-4286. | 2.2 | 4 |
| 153 | Crystallographic analysis of nucleation for random orientations in high-purity tantalum. <i>Journal of Materials Research</i> , 2018, 33, 1755-1763. | 2.6 | 4 |
| 154 | Quasi-In-Situ EBSD Observation of the Orientation Evolution in Polycrystalline Tantalum During Rolling Deformation. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019, 32, 1015-1020. | 2.9 | 4 |
| 155 | Effect of Hot Rolling and Annealing on Phase Component, Recrystallization, and Mechanical Properties of TC21 Titanium Alloy. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 2496-2508. | 2.5 | 4 |
| 156 | Effect of Temperature on Microstructure and Texture during Compression of AZ31. <i>Materials Science Forum</i> , 2007, 546-549, 245-248. | 0.3 | 3 |
| 157 | Microstructure and texture evolution during warm compression of the magnesium alloy AZ31. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 186-189. | 0.9 | 3 |
| 158 | Energy investigations on the mechanical properties of magnesium alloyed by X = C, B, N, O and vacancy. <i>Frontiers of Materials Science</i> , 2013, 7, 405-412. | 2.2 | 3 |
| 159 | Effect of gaseous carbon dioxide on grain refinement in Mg-8Al alloy. <i>Materials Science and Technology</i> , 2017, 33, 2173-2179. | 1.6 | 3 |
| 160 | Characterization of shock-induced anomalous $112\text{-}\beta$ twinning activity in a β -cooled zirconium. <i>Materials Characterization</i> , 2020, 168, 110541. | 4.4 | 3 |
| 161 | Evolution mechanism of lamellar β and interlayered β' during hot compression of TC21 titanium alloy with a Widmanstätten structure. <i>Chinese Journal of Aeronautics</i> , 2021, 35, 475-475. | 5.3 | 3 |
| 162 | Evaluation of Textural Effect on the Rollability of AZ31 Alloys by Wedge-Shaped Sample Design. <i>Advanced Engineering Materials</i> , 2017, 19, 1700035. | 3.5 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Understanding the Role of Short-Range Order in the Nucleation and Transformation of the β'' Precipitates in Al-Mg-Si(-Cu) Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 3366. | 2.2 | 2 |
| 164 | Twin pattern evolution in a fine-grained Mg alloy subjected to indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 673, 430-435. | 5.6 | 1 |
| 165 | Effect of Temperature on Microstructure and Texture during Compression of AZ31. Materials Science Forum, 0, , 245-248. | 0.3 | 1 |
| 166 | β'' Grain Evolution and Static Recrystallization Mechanism during Hot Rolling and Annealing of Ti-35421 Titanium Alloy. Journal of Materials Engineering and Performance, 2022, 31, 9481-9491. | 2.5 | 1 |
| 167 | Effect of Mo and Bi Additions on the Microstructure of Zr-Cr-Fe Alloy After β'' -Quenching. Minerals, Metals and Materials Series, 2017, , 183-192. | 0.4 | 0 |