Rajiv S. Mishra

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3208922/publications.pdf

Version: 2024-02-01

535 papers	29,672 citations	9234 74 h-index	7931 149 g-index
603 all docs	603 docs citations	603 times ranked	11107 citing authors

#	Article	IF	Citations
1	A critical review on mechanical and microstructural properties of dissimilar aluminum (Al)-magnesium (Mg) alloys. Journal of Adhesion Science and Technology, 2023, 37, 1117-1149.	1.4	5
2	Modification of Microstructure and Mechanical Properties of AA6082/ZrB2 Processed by Multipass Friction Stir Processing. Journal of Materials Engineering and Performance, 2023, 32, 285-295.	1.2	20
3	An experimental analysis and optimization of process parameters of AA6061 and AA7075 welded joint by TIG+FSP welding using RSM. Advances in Materials and Processing Technologies, 2022, 8, 598-620.	0.8	33
4	Consequence of reinforced SiC particles on microstructural and mechanical properties of AA6061 surface composites by multi-pass FSP. Journal of Adhesion Science and Technology, 2022, 36, 1279-1298.	1.4	39
5	Elimination of extraordinarily high cracking susceptibility of aluminum alloy fabricated by laser powder bed fusion. Journal of Materials Science and Technology, 2022, 103, 50-58.	5.6	21
6	Effects of plasticity-induced martensitic transformation and grain refinement on the evolution of microstructure and mechanical properties of a metastable high entropy alloy. Journal of Alloys and Compounds, 2022, 891, 161871.	2.8	13
7	Ultrasonic elastography for nondestructive evaluation of dissimilar material joints. Journal of Materials Processing Technology, 2022, 299, 117301.	3.1	8
8	Alloy design and adaptation for additive manufacture. Journal of Materials Processing Technology, 2022, 299, 117358.	3.1	41
9	Mechanical properties and microstructural characteristics of additively manufactured C103 niobium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142183.	2.6	18
10	Friction stir-based additive manufacturing. Science and Technology of Welding and Joining, 2022, 27, 141-165.	1.5	57
11	Unveiling the interplay of deformation mechanisms in a metastable high entropy alloy with tuned composition using synchrotron X-ray diffraction. Materials Today Communications, 2022, 30, 103155.	0.9	0
12	Understanding the nature of passivation film formed during corrosion of Fe39Mn20Co20Cr15Si5Al1 high entropy alloy in 3.5Âwt% NaCl solution. Journal of Alloys and Compounds, 2022, 904, 164100.	2.8	17
13	Cyclic Thermal Dependent Microstructure Evolution During Laser Directed Energy Deposition of H13 Steel. Transactions of the Indian Institute of Metals, 2022, 75, 1007-1014.	0.7	2
14	Role of Cu addition in enhancing strength-ductility synergy in transforming high entropy alloy. Materials and Design, 2022, 215, 110487.	3.3	16
15	Metastable high entropy alloys. Applied Physics Letters, 2022, 120, .	1.5	3
16	Pathways to Titanium Martensite. Transactions of the Indian Institute of Metals, 2022, 75, 1051-1068.	0.7	3
17	Microstructural and mechanical behavior of micro-sized SiC particles reinforced friction stir processed/welded AA7075 and AA6061. Silicon, 2022, 14, 10741-10753.	1.8	10
18	Work hardening in metastable high entropy alloys: a modified five-parameter model. Journal of Materials Research and Technology, 2022, 18, 3358-3372.	2.6	10

#	Article	IF	Citations
19	Influence of Reinforcement with Multi-Pass FSW on the Mechanical and Microstructural Behavior of Dissimilar Weld Joint of AA5083 and AA6061. Silicon, 2022, 14, 11219-11233.	1.8	8
20	Highly complex magnetic behavior resulting from hierarchical phase separation in AlCo(Cr)FeNi high-entropy alloys. IScience, 2022, 25, 104047.	1.9	8
21	Mechanical Properties and Microstructure Evolution Of AA6082/Sic Nanocomposite Processed by Multi-Pass FSP. Transactions of the Indian Institute of Metals, 2022, 75, 2077-2090.	0.7	26
22	Effect of Al₂O₃ nanoparticles on microstructure and mechanical properties of friction stir-welded dissimilar aluminum alloys AA7075-T6 and AA6061-T6. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2022, 236, 1511-1521.	1.4	16
23	Additive friction stir deposition of AZ31B magnesium alloy. Journal of Magnesium and Alloys, 2022, 10, 2404-2420.	5.5	30
24	Influence of welding parameters on mechanical, microstructure, and corrosion behavior of friction stir welded Al 7017 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 846, 143303.	2.6	13
25	Stress contribution of B2 phase in Al0.7CoCrFeNi eutectic high entropy alloy. Journal of Alloys and Compounds, 2022, 918, 165673.	2.8	4
26	Friction stir welding of SS 316 LN and Nitronic 50 jacket sections for application in superconducting fusion magnet systems. Materials and Design, 2022, 221, 110949.	3.3	5
27	Effect of friction stir processing on mechanical properties and heat transfer of TIG welded joint of AA6061 and AA7075. Defence Technology, 2021, 17, 715-727.	2.1	47
28	Additively manufactured novel Al-Cu-Sc-Zr alloy: Microstructure and mechanical properties. Additive Manufacturing, 2021, 37, 101623.	1.7	11
29	Additive friction stir deposition: a deformation processing route to metal additive manufacturing. Materials Research Letters, 2021, 9, 71-83.	4.1	96
30	Microstructureâ€“Property Correlation in a Laser Powder Bed Fusion Processed Highâ€Strength AFâ€9628 Steel. Advanced Engineering Materials, 2021, 23, .	1.6	7
31	Stress Corrosion Cracking of TRIP Fe39Mn20Co20Cr15Si5Al1 (at.%) High Entropy Alloy. Minerals, Metals and Materials Series, 2021, , 742-750.	0.3	1
32	Crystallographic texture dependent bulk anisotropic elastic response of additively manufactured Ti6Al4V. Scientific Reports, 2021, 11, 633.	1.6	16
33	Co-introduction of precipitate hardening and TRIP in a TWIP high-entropy alloy using friction stir alloying. Scientific Reports, 2021, 11, 1579.	1.6	8
34	Optimization of friction stir welding process parameters during joining of aluminum alloys of AA6061 and AA6082. Materials Today: Proceedings, 2021, 45, 5368-5376.	0.9	10
35	Effect of Friction Stir Processing on Mechanical Properties and Wear Resistance of Tungsten Inert Gas Welded Joint of Dissimilar Aluminum Alloys. Journal of Materials Engineering and Performance, 2021, 30, 1926-1937.	1.2	40
36	Some Unique Aspects of Mechanical Behavior of Metastable Transformative High Entropy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 889-896.	1.1	17

#	Article	IF	Citations
37	Effect of supercritical CO₂ on salt water corrosion and wear resistance of bismaleimide coating filled with organophilic montmorillonite clay. Journal of Adhesion Science and Technology, 2021, 35, 2301-2318.	1.4	2
38	Tri-objective constrained optimization of pulsating DC sourced magnetic abrasive finishing process parameters using artificial neural network and genetic algorithm. Materials and Manufacturing Processes, 2021, 36, 843-857.	2.7	27
39	Development of Al₂O₃-SiO₂ based magnetic abrasive by sintering method and its performance on Ti-6Al-4V during magnetic abrasive finishing. Transactions of the Institute of Metal Finishing, 2021, 99, 94-101.	0.6	19
40	Spatial Variation of Thermokinetics and Associated Microstructural Evolution in Laser Surface Engineered IN718: Precursor to Additive Manufacturing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 2344-2360.	1.1	8
41	Precipitation in nanostructured alloys: A brief review. MRS Bulletin, 2021, 46, 250-257.	1.7	11
42	Chemical-Affinity Disparity and Exclusivity Drive Atomic Segregation, Short-Range Ordering, and Cluster Formation in High-Entropy Alloys. Acta Materialia, 2021, 206, 116638.	3.8	45
43	High entropy alloys â€“ Tunability of deformation mechanisms through integration of compositional and microstructural domains. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 812, 141085.	2.6	75
44	Strain rate sensitive microstructural evolution in a TRIP assisted high entropy alloy: Experiments, microstructure and modeling. Mechanics of Materials, 2021, 156, 103798.	1.7	19
45	Microstructure and mechanical characterization of tungsten inert gas-welded joint of AA6061 and AA7075 by friction stir processing. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2021, 235, 2531-2546.	0.7	25
46	Insights into Defect-Mediated Nucleation of Equilibrium B2 Phase in Face-Centered Cubic High-Entropy Alloys. Jom, 2021, 73, 2320-2331.	0.9	5
47	Design of heterogeneous structured Al alloys with wide processing window for laser-powder bed fusion additive manufacturing. Additive Manufacturing, 2021, 42, 102002.	1.7	10
48	Design approaches for printability-performance synergy in Al alloys for laser-powder bed additive manufacturing. Materials and Design, 2021, 204, 109640.	3.3	80
49	Direct evidence of the stacking fault-mediated strain hardening phenomenon. Applied Physics Letters, 2021, 119, .	1.5	18
50	Modeling the work hardening behavior in metastable high entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 823, 141778.	2.6	11
51	Friction stir processing of a high entropy alloy Fe42Co10Cr15Mn28Si5 with transformative characteristics: Microstructure and mechanical properties. Materials Today Communications, 2021, 28, 102635.	0.9	4
52	Transformative high entropy alloy conquers the strength-ductility paradigm by massive interface strengthening. Scripta Materialia, 2021, 203, 114070.	2.6	13
53	Metastable high entropy alloys: An excellent defect tolerant material for additive manufacturing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 826, 142005.	2.6	21
54	Segregation engineering of grain boundaries of a metastable Fe-Mn-Co-Cr-Si high entropy alloy with laser-powder bed fusion additive manufacturing. Acta Materialia, 2021, 219, 117271.	3.8	67

#	Article	IF	Citations
55	Role of binder phase on the microstructure and mechanical properties of a mechanically alloyed and spark plasma sintered WC-FCC HEA composites. Journal of Alloys and Compounds, 2021, 877, 160265.	2.8	34
56	High density of strong yet deformable intermetallic nanorods leads to an excellent room temperature strength-ductility combination in a high entropy alloy. Acta Materialia, 2021, 219, 117234.	3.8	59
57	Friction stir welding of Î³-fcc dominated metastable high entropy alloy: Microstructural evolution and strength. Scripta Materialia, 2021, 204, 114161.	2.6	20
58	Processing-structure-property correlation in additive friction stir deposited Ti-6Al-4V alloy from recycled metal chips. Additive Manufacturing, 2021, 47, 102259.	1.7	27
59	Proton irradiation induced chemical ordering in an Al0.3CoFeNi high entropy alloy. Applied Physics Letters, 2021, 119, .	1.5	4
60	Effect of multi-pass friction stir processing and SiC nanoparticles on microstructure and mechanical properties of AA6082-T6. Advances in Industrial and Manufacturing Engineering, 2021, 3, 100062.	1.2	31
61	Excellent ballistic impact resistance of Al0.3CoCrFeNi multi-principal element alloy with unique bimodal microstructure. Scientific Reports, 2021, 11, 22715.	1.6	14
62	Ultrasonic spot welding of dissimilar Al 6022 and Al 7075 alloys. Journal of Materials Processing Technology, 2020, 278, 116460.	3.1	15
63	Aging response on the stress corrosion cracking behavior of wrought precipitation-hardened magnesium alloy. Journal of Materials Science, 2020, 55, 1216-1230.	1.7	10
64	Enhanced tensile yield strength in laser additively manufactured Al0.3CoCrFeNi high entropy alloy. Materialia, 2020, 9, 100522.	1.3	46
65	Deformation of lamellar FCC-B2 nanostructures containing Kurdjumov-Sachs interfaces: Relation between interfacial structure and plasticity. International Journal of Plasticity, 2020, 125, 191-209.	4.1	33
66	Interplay between single phase solid solution strengthening and multi-phase strengthening in the same high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138620.	2.6	26
67	Superplasticity in fine grained dual phase high entropy alloy. Materialia, 2020, 9, 100521.	1.3	20
68	Hall-Petch and inverse Hall-Petch relations in high-entropy CoNiFeAlxCu1-x alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138873.	2.6	93
69	Investigating the deformation mechanisms of a highly metastable high entropy alloy using in-situ neutron diffraction. Materials Today Communications, 2020, 23, 100858.	0.9	18
70	Friction stir gradient alloying: A novel solid-state high throughput screening technique for high entropy alloys. Materials Today Communications, 2020, 23, 100869.	0.9	14
71	An integrated computational materials engineering-anchored closed-loop method for design of aluminum alloys for additive manufacturing. Materialia, 2020, 9, 100574.	1.3	40
72	Friction stir processing of a metastable Î² titanium alloy in Î² and Î±+Î² phase fields. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 772, 138705.	2.6	8

#	Article	IF	Citations
73	Deformation mechanisms and ductile fracture characteristics of a friction stir processed transformative high entropy alloy. Acta Materialia, 2020, 184, 164-178.	3.8	30
74	Defect-based probabilistic fatigue life estimation model for an additively manufactured aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 798, 140082.	2.6	25
75	Friction stir gradient alloying: A high-throughput method to explore the influence of V in enabling HCP to BCC transformation in a Î³-FCC dominated high entropy alloy. Applied Materials Today, 2020, 21, 100853.	2.3	17
76	Damage-tolerant, corrosion-resistant high entropy alloy with high strength and ductility by laser powder bed fusion additive manufacturing. Additive Manufacturing, 2020, 36, 101455.	1.7	17
77	Microstructurally flexible high entropy alloys: Linkages between alloy design and deformation behavior. Materials and Design, 2020, 194, 108968.	3.3	34
78	Effect of Strain Rate on Deformation Response of Metastable High Entropy Alloys Upon Friction Stir Processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5043-5048.	1.1	5
79	Correlating work hardening with co-activation of stacking fault strengthening and transformation in a high entropy alloy using in-situ neutron diffraction. Scientific Reports, 2020, 10, 22263.	1.6	17
80	Dynamic Shear Deformation of a Precipitation Hardened Al0.7CoCrFeNi Eutectic High-Entropy Alloy Using Hat-Shaped Specimen Geometry. Entropy, 2020, 22, 431.	1.1	16
81	Metastability driven hierarchical microstructural engineering: Overview of mechanical properties of metastable complex concentrated alloys. Journal of Alloys and Compounds, 2020, 842, 155625.	2.8	24
82	Ballistic Impact Response of Al_{0.1}CoCrFeNi Highâ€Entropy Alloy. Advanced Engineering Materials, 2020, 22, 2070025.	1.6	2
83	Highly tunable magnetic and mechanical properties in an Al0.3CoFeNi complex concentrated alloy. Materialia, 2020, 12, 100755.	1.3	17
84	Hierarchical Eutectoid Nano-lamellar Decomposition in an Al0.3CoFeNi Complex Concentrated Alloy. Scientific Reports, 2020, 10, 4836.	1.6	27
85	Rapid thermokinetics driven nanoscale vanadium clustering within martensite laths in laser powder bed fused additively manufactured Ti6Al4V. Materials Research Letters, 2020, 8, 383-389.	4.1	33
86	Investigation of mechanical properties and heat transfer of welded joint of AA6061 and AA7075 using TIG+FSP welding approach. Journal of Advanced Joining Processes, 2020, 1, 100003.	1.5	40
87	Excellent high cyclic fatigue properties of a novel ultrafine-grained medium entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 779, 139122.	2.6	31
88	Effect of temperature on the fatigue cracking mechanisms in A356 Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 780, 139175.	2.6	10
89	Excellent strength-ductility synergy in metastable high entropy alloy by laser powder bed additive manufacturing. Additive Manufacturing, 2020, 32, 101098.	1.7	29
90	Notch-tensile behavior of Al0.1CrFeCoNi high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138918.	2.6	13

#	Article	IF	Citations
91	Process-Dependent Composition, Microstructure, and Printability of Al-Zn-Mg and Al-Zn-Mg-Sc-Zr Alloys Manufactured by Laser Powder Bed Fusion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3215-3227.	1.1	48
92	Ballistic Impact Response of Al_{0.1}CoCrFeNi Highâ€Entropy Alloy. Advanced Engineering Materials, 2020, 22, 2000124.	1.6	21
93	Effect of Friction Stir Processing on Microstructure and Mechanical Properties of TIG Welded Joint of AA6061 and AA7075. Metallography, Microstructure, and Analysis, 2020, 9, 403-418.	0.5	43
94	Influence of Friction Stir Processing on Weld Temperature Distribution and Mechanical Properties of TIG-Welded Joint of AA6061 and AA7075. Transactions of the Indian Institute of Metals, 2020, 73, 1773-1788.	0.7	54
95	Friction stir butt welding of a high strength Al-7050 alloy with a metastable transformative high entropy alloy. Materialia, 2020, 11, 100740.	1.3	13
96	Achieving extraordinary structural efficiency in a wrought magnesium rare earth alloy. Materials Research Letters, 2020, 8, 151-157.	4.1	22
97	Hierarchically Structured Ultrafine Grained Magnesium Alloys. Minerals, Metals and Materials Series, 2020, , 7-11.	0.3	0
98	Fatigue Behavior of High Entropy Alloys. , 2020, , 411-428.		0
99	Analysis of Material Flow and Heat Transfer in Reverse Dual Rotation Friction Stir Welding: A Review. International Journal of Steel Structures, 2019, 19, 422-434.	0.6	18
100	Effect of hook characteristics on the fracture behaviour of dissimilar friction stir welded aluminium alloy and mild steel sheets. Science and Technology of Welding and Joining, 2019, 24, 178-184.	1.5	38
101	A State-of-the-Art Review on Solid-State Metal Joining. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	111
102	Evolution of bond formation and fracture process of ultrasonic spot welded dissimilar materials. Science and Technology of Welding and Joining, 2019, 24, 171-177.	1.5	12
103	Ballistic Response of a FCC-B2 Eutectic AlCoCrFeNi2.1 High Entropy Alloy. Journal of Dynamic Behavior of Materials, 2019, 5, 495-503.	1.1	14
104	A novel nano-particle strengthened titanium alloy with exceptional specific strength. Scientific Reports, 2019, 9, 11726.	1.6	11
105	Compositionally graded high entropy alloy with a strong front and ductile back. Materials Today Communications, 2019, 20, 100602.	0.9	18
106	Corrosion of Al_{0.1}CoCrFeNi High Entropy Alloy in a Molten Eutectic Salt. Journal of the Electrochemical Society, 2019, 166, C3488-C3492.	1.3	13
107	Friction Stir Processing of Beta C and Ti-185: A Unique Pathway to Engineer Microstructures for Exceptional Properties in Î² Titanium Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4075-4084.	1.1	6
108	Characterization of as-cast microstructural heterogeneities and damage mechanisms in eutectic AlCoCrFeNi2.1 high entropy alloy. Materials Characterization, 2019, 158, 109955.	1.9	26

#	Article	IF	Citations
109	Exploration of Novel Nano-scale Instabilities in Metastable Beta Titanium Alloys Using Transmission Electron Microscopy and Aberration-Corrected Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2019, 25, 2276-2277.	0.2	0
110	On the evolving nature of c/a ratio in a hexagonal close-packed epsilon martensite phase in transformative high entropy alloys. Scientific Reports, 2019, 9, 13185.	1.6	40
111	Aqueous Corrosion Behavior of Cast CoCrFeMnNi Alloy. Journal of Materials Engineering and Performance, 2019, 28, 5970-5977.	1.2	14
112	Immiscible nanostructured copper-aluminum-niobium alloy with excellent precipitation strengthening upon friction stir processing and aging. Scripta Materialia, 2019, 164, 42-47.	2.6	13
113	Significant Contribution to Strength Enhancement from Deformation Twins in Thermomechanically Processed Al0.1CoCrFeNi Microstructures. Journal of Materials Engineering and Performance, 2019, 28, 1661-1667.	1.2	10
114	Laser additive manufacturing of compositionally graded AlCrFeMoVx (xâ€¯=â€¯0 to 1) high-entropy alloy system. Optics and Laser Technology, 2019, 113, 330-337.	2.2	55
115	Microstructure, fatigue, and impact toughness properties of additively manufactured nickel alloy 718. Additive Manufacturing, 2019, 28, 661-675.	1.7	32
116	Effect of nano-sized precipitates on the fatigue property of a lamellar structured high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 760, 225-230.	2.6	28
117	Study of the influence of friction stir processing on tungsten inert gas welding of different aluminum alloy. SN Applied Sciences, 2019, 1, 1.	1.5	36
118	Nanoindentation behavior of high entropy alloys with transformation-induced plasticity. Scientific Reports, 2019, 9, 6639.	1.6	41
119	Extremely high fatigue resistance in an ultrafine grained high entropy alloy. Applied Materials Today, 2019, 15, 525-530.	2.3	61
120	Development of in situ composites via reactive friction stir processing of Tiâ€“B4C system. Composites Part B: Engineering, 2019, 172, 54-60.	5.9	38
121	Influence of ordered L12 precipitation on strain-rate dependent mechanical behavior in a eutectic high entropy alloy. Scientific Reports, 2019, 9, 6371.	1.6	59
122	Role of copper on L12 precipitation strengthened fcc based high entropy alloy. Materialia, 2019, 6, 100282.	1.3	31
123	Tribocorrosion performance of laser additively processed high-entropy alloy coatings on aluminum. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	13
124	Revealing the microstructural evolution in a high entropy alloy enabled with transformation, twinning and precipitation. Materialia, 2019, 6, 100310.	1.3	16
125	Evaluation of intermetallic compound layer at aluminum/steel interface joined by friction stir scribe technology. Materials and Design, 2019, 174, 107795.	3.3	70
126	Corrosion-resistant high entropy alloy with high strength and ductility. Scripta Materialia, 2019, 166, 168-172.	2.6	148

#	Article	IF	Citations
127	Channel formation during friction stir channeling process â€" A material flow study using X-Ray micro-computed tomography and optical microscopy. Journal of Manufacturing Processes, 2019, 41, 48-55.	2.8	22
128	Achieving Forced Mixing in Cu-Based Immiscible Alloys via Friction Stir Processing. Minerals, Metals and Materials Series, 2019, , 199-208.	0.3	3
129	Effect of reactive alloy elements on friction stir welded butt joints of metallurgically immiscible magnesium alloys and steel. Journal of Manufacturing Processes, 2019, 39, 138-145.	2.8	26
130	Wear Mechanism for H13 Steel Tool During Friction Stir Welding of CuCrZr Alloy. Minerals, Metals and Materials Series, 2019, , 59-64.	0.3	2
131	Fatigue behavior of ultrafine grained triplex Al0.3CoCrFeNi high entropy alloy. Scripta Materialia, 2019, 158, 116-120.	2.6	101
132	Strengthening of Al0.3CoCrFeMnNi-based ODS high entropy alloys with incremental changes in the concentration of Y2O3. Scripta Materialia, 2019, 162, 477-481.	2.6	52
133	Microstructure and mechanical behavior of an additive manufactured (AM) WE43-Mg alloy. Additive Manufacturing, 2019, 26, 53-64.	1.7	50
134	High strain rate mechanical behavior of Ti-6Al-4V octet lattice structures additively manufactured by selective laser melting (SLM). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 745, 231-239.	2.6	37
135	Aluminaâ€"Nickel Composite Processed via Coâ€Assembly Using Freezeâ€Casting and Spark Plasma Sintering. Advanced Engineering Materials, 2019, 21, 1801103.	1.6	17
136	Enhancing strength and strain hardenability via deformation twinning in fcc-based high entropy alloys reinforced with intermetallic compounds. Acta Materialia, 2019, 165, 420-430.	3.8	155
137	Corrosion Inhibition Study of Mg-Nd-Y High Strength Magnesium Alloy Using Organic Inhibitor. Journal of Materials Engineering and Performance, 2019, 28, 852-862.	1.2	22
138	High Strain Rate Response of Al0.7CoCrFeNi High Entropy Alloy: Dynamic Strength Over 2ÂGPa from Thermomechanical Processing and Hierarchical Microstructure. Journal of Dynamic Behavior of Materials, 2019, 5, 1-7.	1.1	4
139	Technological Innovations in Metals Engineering. Jom, 2019, 71, 651-654.	0.9	0
140	Microstructural Evolution and Deformation Behavior of Ni-Si- and Co-Si-Containing Metastable High Entropy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 179-190.	1.1	10
141	Tensile yield strength of a single bulk Al0.3CoCrFeNi high entropy alloy can be tuned from 160â€MPa to 1800â€MPa. Scripta Materialia, 2019, 162, 18-23.	2.6	138
142	Towards heterogeneous AlxCoCrFeNi high entropy alloy via friction stir processing. Materials Letters, 2019, 236, 472-475.	1.3	48
143	Hierarchical multi-phase microstructural architecture for exceptional strength-ductility combination in a complex concentrated alloy via high-temperature severe plastic deformation. Scripta Materialia, 2019, 162, 38-43.	2.6	30
144	Contrasting mechanical behavior in precipitation hardenable AlXCoCrFeNi high entropy alloy microstructures: Single phase FCC vs. dual phase FCC-BCC. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 739, 158-166.	2.6	97

#	Article	IF	Citations
145	Deformation induced intermediate metastable lattice structures facilitate ordered B2 nucleation in a fcc-based high entropy alloy. Materials Research Letters, 2019, 7, 40-46.	4.1	20
146	Effect of Stress Concentration on Strength and Fracture Behavior of Dissimilar Metal Joints. Minerals, Metals and Materials Series, 2019, , 33-39.	0.3	3
147	Performance analysis of solar parabolic trough collectors driven combined supercritical CO 2 and organic Rankine cycle. Engineering Science and Technology, an International Journal, 2018, 21, 451-464.	2.0	31
148	Crystallographically degenerate B2 precipitation in a plastically deformed fcc-based complex concentrated alloy. Materials Research Letters, 2018, 6, 171-177.	4.1	40
149	Performance evaluation of the supercritical organic rankine cycle (SORC) integrated with large scale solar parabolic trough collector (SPTC) system: An exergy energy analysis. Environmental Progress and Sustainable Energy, 2018, 37, 891-899.	1.3	13
150	Influence of friction stir processing on the room temperature fatigue cracking mechanisms of A356 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 716, 165-178.	2.6	51
151	Characterization of 3â€³ through-thickness friction stir welded 7050-T7451 Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 716, 55-62.	2.6	20
152	Friction stir lap welding of stainless steel and plain carbon steel to enhance corrosion properties. Journal of Materials Processing Technology, 2018, 259, 259-269.	3.1	23
153	Thermo-mechanical response of single-phase face-centered-cubic Al_xCoCrFeNi high-entropy alloy microcrystals. Materials Research Letters, 2018, 6, 300-306.	4.1	15
154	Microstructural comparison of friction-stir-welded aluminum alloy 7449 starting from different tempers. Journal of Materials Science, 2018, 53, 9273-9286.	1.7	10
155	Accelerated age hardening response by in-situ ultrasonic aging of a WE43 alloy. Materials and Manufacturing Processes, 2018, 33, 104-108.	2.7	3
156	Microstructure and wear resistance of an intermetallic-based Al0.25Ti0.75CoCrFeNi high entropy alloy. Materials Chemistry and Physics, 2018, 210, 197-206.	2.0	53
157	Reciprocating sliding wear behavior of high entropy alloys in dry and marine environments. Materials Chemistry and Physics, 2018, 210, 162-169.	2.0	82
158	Effect of friction stir processed microstructure on tensile properties of an Al-Zn-Mg-Sc alloy upon subsequent aging heat treatment. Journal of Materials Science and Technology, 2018, 34, 214-218.	5.6	42
159	Microstructure and mechanical properties of friction stir processed cast Eglin steel (ES-1). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 709, 105-114.	2.6	10
160	Friction stir scribe welding technique for dissimilar joining of aluminium and galvanised steel. Science and Technology of Welding and Joining, 2018, 23, 249-255.	1.5	36
161	Grain size dependence of fatigue properties of friction stir processed ultrafine-grained Al-5024 alloy. International Journal of Fatigue, 2018, 109, 1-9.	2.8	39
162	3D Atom Probe Tomography Study on Segregation of Yttrium in Modified Al-Si Alloys. Jom, 2018, 70, 1765-1770.	0.9	5

#	Article	IF	Citations
163	Small-Scale Plastic Deformation of Nanocrystalline High Entropy Alloy. Entropy, 2018, 20, 889.	1.1	8
164	Pressurized ultrasonic production of biodiesel from Jatropha oil: optimization and energy analysis. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, , 1-8.	1.2	1
165	Metastability-assisted fatigue behavior in a friction stir processed dual-phase high entropy alloy. Materials Research Letters, 2018, 6, 613-619.	4.1	54
166	Surface degradation mechanisms in precipitation-hardened high-entropy alloys. Npj Materials Degradation, 2018, 2, .	2.6	31
167	Unexpected strengthâ€“ductility response in an annealed, metastable, high-entropy alloy. Applied Materials Today, 2018, 13, 198-206.	2.3	50
168	Detailed parametric analysis of solar driven supercritical CO2 based combined cycle for power generation, cooling and heating effect by vapor absorption refrigeration as a bottoming cycle. Thermal Science and Engineering Progress, 2018, 8, 397-410.	1.3	33
169	Hierarchical features infused heterogeneous grain structure for extraordinary strength-ductility synergy. Materials Research Letters, 2018, 6, 676-682.	4.1	103
170	A State-of-the-Art Review on Solid-State Metal Joining. , 2018, , .		69
171	Friction stir butt welding of strain-hardened aluminum alloy with high strength steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 737, 85-89.	2.6	28
172	Grain size dependence of strain rate sensitivity in a single phase FCC high entropy alloy Al0.3CoCrFeNi. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 344-348.	2.6	49
173	High-entropy alloy strengthened by in situ formation of entropy-stabilized nano-dispersoids. Scientific Reports, 2018, 8, 14085.	1.6	55
174	A novel method to enhance CSL fraction, tensile properties and work hardening in complex concentrated alloys â€• Lattice distortion effect. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 383-391.	2.6	32
175	Friction stir processing of newly-designed Mg-5Al-3.5Ca-1Mn (AXM541) alloy: Microstructure evolution and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 729, 294-299.	2.6	15
176	Reversed strength-ductility relationship in microstructurally flexible high entropy alloy. Scripta Materialia, 2018, 154, 163-167.	2.6	72
177	Investigation of plastic deformation modes in Al0.1CoCrFeNi high entropy alloy. Materials Chemistry and Physics, 2018, 217, 308-314.	2.0	35
178	Influences of Post-processing, Location,ÂOrientation, and Induced Porosity on the Dynamic Compression Behavior of Tiâ€“6Alâ€“4V Alloy Built Through Additive Manufacturing. Journal of Dynamic Behavior of Materials, 2018, 4, 441-451.	1.1	19
179	Simultaneous enhancement of strength and ductility in an AlCoCrFeNi2.1 eutectic high-entropy alloy via friction stir processing. Journal of Alloys and Compounds, 2018, 766, 312-317.	2.8	63
180	Hierarchical microstructure for improved fatigue properties in a eutectic high entropy alloy. Scripta Materialia, 2018, 156, 105-109.	2.6	103

#	Article	IF	Citations
181	Towards attaining dissimilar lap joint of CuCrZr alloy and 316L stainless steel using friction stir welding. Science and Technology of Welding and Joining, 2018, 23, 715-720.	1.5	15
182	Microstructures with extraordinary dynamic work hardening and strain rate sensitivity in Al0.3CoCrFeNi high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 42-50.	2.6	46
183	Extremely high strength and work hardening ability in a metastable high entropy alloy. Scientific Reports, 2018, 8, 9920.	1.6	96
184	Microstructure, mechanical properties and strengthening mechanisms of friction stir welded Kanthal APMTâ„¢ steel. Journal of Nuclear Materials, 2018, 509, 435-444.	1.3	7
185	Modifying transformation pathways in high entropy alloys or complex concentrated alloys via thermo-mechanical processing. Acta Materialia, 2018, 153, 169-185.	3.8	169
186	Towards Obtaining Sound Butt Joint Between Metallurgically Immiscible Pure Cu and Stainless Steel Through Friction Stir Welding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 2578-2582.	1.1	30
187	Microstructural dependence of strain rate sensitivity in thermomechanically processed Al0.1CoCrFeNi high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 727, 148-159.	2.6	33
188	Investigation of Clusters and Their Effect on Grain Growth in Single Phase AlxCoCrFeNi High Entropy Alloys. Microscopy and Microanalysis, 2018, 24, 2214-2215.	0.2	0
189	Control of Reaction Kinetics During Friction Stir Processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2115-2119.	1.1	1
190	Atomic simulations of twist grain boundary structures and deformation behaviors in aluminum. AIP Advances, 2017, 7, .	0.6	20
191	Understanding Microstructure and Mechanical Properties of Friction Stir Processed Aluminum-Bearing High-Chromium Ferritic Stainless Steel. Minerals, Metals and Materials Series, 2017, , 263-272.	0.3	0
192	Microstructural variation due to heat gradient of a thick friction stir welded aluminum 7449 alloy. Journal of Alloys and Compounds, 2017, 713, 51-63.	2.8	39
193	Impact of thermal management on post weld heat treatment efficacy in friction stir welded 2050-T3 alloy. Journal of Alloys and Compounds, 2017, 722, 330-338.	2.8	40
194	A Combinatorial Approach for Assessing the Magnetic Properties of High Entropy Alloys: Role of Cr in AlCo_xCr_{1â€“x}FeNi. Advanced Engineering Materials, 2017, 19, 1700048.	1.6	95
195	Microstructural Homogeneity and Hot Deformation of Various Friction-Stir-Processed 5083 Al Alloys. Journal of Materials Engineering and Performance, 2017, 26, 460-464.	1.2	2
196	Effect of tool dimensions and parameters on the microstructure of friction stir welded aluminum 7449 alloy of various thicknesses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 470-479.	2.6	31
197	Serration behavior and negative strain rate sensitivity of Al0.1CoCrFeNi high entropy alloy. Intermetallics, 2017, 84, 20-24.	1.8	44
198	Additive manufacturing of metals: a brief review of the characteristic microstructures and properties of steels, Ti-6Al-4V and high-entropy alloys. Science and Technology of Advanced Materials, 2017, 18, 584-610.	2.8	660

#	Article	IF	Citations
199	Building without melting: a short review of friction-based additive manufacturing techniques. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 82.	0.2	21
200	Enhancing elevated temperature strength of copper containing aluminium alloys by forming L12 Al3Zr precipitates and nucleating Î¸â€³ precipitates on them. Scientific Reports, 2017, 7, 11154.	1.6	41
201	Understanding effect of 3.5Âwt.% NaCl on the corrosion of Al0.1CoCrFeNi high-entropy alloy. Journal of Nuclear Materials, 2017, 495, 154-163.	1.3	117
202	Exceptional increase in the creep life of magnesium rare-earth alloys due to localized bond stiffening. Nature Communications, 2017, 8, 2000.	5.8	36
203	Enhanced strength and ductility in a friction stir processing engineered dual phase high entropy alloy. Scientific Reports, 2017, 7, 16167.	1.6	127
204	Investigation of Novel Phase Transformation Mechanisms in Titanium Alloys Using Atom Probe and Aberration-Corrected Scanning Transmission Electron Microscope. Microscopy and Microanalysis, 2017, 23, 730-731.	0.2	0
205	Magnesium Alloys. , 2017, , 345-383.		8
206	Physical Metallurgy of 2XXX Aluminum Alloys. , 2017, , 15-36.		7
207	Friction Stir Welding. , 2017, , 1-13.		10
208	Temperature Evolution and Thermal Management During FSW of 2XXX Alloys. , 2017, , 37-46.		1
209	FSW of Alâ€“Cu and Alâ€“Cuâ€“Mg Alloys. , 2017, , 47-77.		1
210	Friction Stir Welding of Alâ€“Li Alloys. , 2017, , 79-95.		13
211	Physical Metallurgy-Based Guidelines for Obtaining High Joint Efficiency. , 2017, , 97-99.		0
212	Summary and Future Outlook. , 2017, , 101-102.		0
213	Insertion of New Alloys and Process Technologies. , 2017, , 451-457.		1
214	Ultrahigh Strength Steels. , 2017, , 289-343.		4
215	Aluminum Alloys. , 2017, , 57-176.		12
216	Alloy Design for Advanced Manufacturing Processes. , 2017, , 407-449.		1

#	Article	IF	Citations
217	Titanium Alloys. , 2017, , 177-288.		10
218	Complex Concentrated Alloys Including High Entropy Alloys. , 2017, , 385-405.		2
219	Modeling of Processingâ€“Microstructureâ€“Properties Relationships. , 2017, , 21-41.		2
220	Alloy Design Approaches. , 2017, , 43-56.		0
221	Building without melting: a short review of friction-based additive manufacturing techniques. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 82.	0.2	10
222	Summary and Future Outlook. , 2016, , 103-104.		1
223	Mechanical Properties Enhancement. , 2016, , 29-70.		0
224	Laser Assisted Additively Manufactured Transition Metal Coating on Aluminum. Jom, 2016, 68, 1819-1829.	0.9	1
225	Precipitate-dislocation interaction mediated Portevin-Le Chatelier-like effect in a beta-stabilized Ti-Mo-Nb-Al alloy. Scripta Materialia, 2016, 124, 15-20.	2.6	30
226	Local structure, composition, and crystallization mechanism of a model two-phase â€œcomposite nanoglassâ€• Journal of Chemical Physics, 2016, 144, 064503.	1.2	3
227	Investigation of Thermo-Mechanical Processing and Mechanical Properties of CoCrFeNiMn High Entropy Alloy for Peripheral Vascular Stent Application. , 2016, , .		1
228	Friction stir processing of A-286 stainless steel: Microstructural evolution during wear. Wear, 2016, 356-357, 94-100.	1.5	35
229	Magnetic Properties of Friction Stir Processed Composite. Jom, 2016, 68, 1925-1931.	0.9	5
230	On the creep behavior of dual-scale particle strengthened nickel based alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 676, 406-410.	2.6	8
231	A framework for shear driven dissolution of thermally stable particles during friction stir welding and processing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 678, 308-314.	2.6	37
232	Aging kinetics of friction stir welded Al-Cu-Li-Mg-Ag and Al-Cu-Li-Mg alloys. Materials and Design, 2016, 110, 60-71.	3.3	71
233	Physical Metallurgy of 7XXX Alloys. , 2016, , 5-14.		0
234	Friction Stir Weldingâ€”Overview. , 2016, , 15-20.		7

#	Article	IF	Citations
235	Temperature Distribution. , 2016, , 21-28.		0
236	Microstructural Evolution. , 2016, , 29-47.		0
237	Physical Metallurgy-Based Guidelines for Obtaining High Joint Efficiency. , 2016, , 101-102.		1
238	Effect of friction stir processing on microstructure and mechanical properties of laser-processed Mg 4Y 3Nd alloy. Materials and Design, 2016, 110, 663-675.	3.3	28
239	Pine Wood Extracted Activated Carbon through Selfâ€Activation Process for Highâ€Performance Lithiumâ€Ion Battery. ChemistrySelect, 2016, 1, 4000-4007.	0.7	16
240	Extreme creep resistance in a microstructurally stable nanocrystalline alloy. Nature, 2016, 537, 378-381.	13.7	199
241	Evaluation of plastic zone development in WE43 magnesium alloy upon friction stir processing using finite element modeling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 673, 178-184.	2.6	9
242	Mechanical Properties of High Entropy Alloy Al0.1CoCrFeNi for Peripheral Vascular Stent Application. Cardiovascular Engineering and Technology, 2016, 7, 448-454.	0.7	31
243	Friction stir welding of Alâ€“Mgâ€“Li 1424 alloy. Materials and Design, 2016, 106, 146-152.	3.3	67
244	Influence of friction stir processing tool design on microstructure and superplastic behavior of Al-Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 670, 9-16.	2.6	47
245	On the role of Ag in enhanced age hardening kinetics of Mgâ€“Gdâ€“Agâ€“Zr alloys. Philosophical Magazine Letters, 2016, 96, 212-219.	0.5	36
246	Friction Stir Processing. , 2016, , 5-27.		2
247	Superplasticity. , 2016, , .		2
248	Anomalies in the deformation mechanism and kinetics of coarse-grained high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 654, 256-263.	2.6	83
249	Spatially dependent properties in a laser additive manufactured Tiâ€“6Alâ€“4V component. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 654, 39-52.	2.6	78
250	Structure and thermal decomposition of a nanocrystalline mechanically alloyed supersaturated Cuâ€“Ta solid solution. MRS Communications, 2015, 5, 333-339.	0.8	24
251	Atomic Distribution in Catalytic Amorphous Metals. Journal of Nanomaterials, 2015, 2015, 1-7.	1.5	3
252	Oxide dispersion strengthened nickel based alloys via spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 630, 155-169.	2.6	71

#	Article	IF	Citations
253	Friction Stir Additive Manufacturing: Route to High Structural Performance. Jom, 2015, 67, 616-621.	0.9	103
254	High strain-rate compressive deformation behavior of the Al0.1CrFeCoNi high entropy alloy. Materials and Design, 2015, 86, 598-602.	3.3	223
255	Effect of tool rotation rate on constituent particles in a friction stir processed 2024Al alloy. Materials Letters, 2015, 160, 64-67.	1.3	23
256	Effect of Microstructure on the Deformation Mechanism of Friction Stir-Processed Al_{0.1}CoCrFeNi High Entropy Alloy. Materials Research Letters, 2015, 3, 30-34.	4.1	104
257	Friction Stir Processing of a High Entropy Alloy Al0.1CoCrFeNi. Jom, 2015, 67, 1007-1013.	0.9	89
258	Inhibition of abnormal grain growth during hot deformation behavior of friction stir processed 5083 Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 636, 326-330.	2.6	31
259	Lattice strain framework for plastic deformation in complex concentrated alloys including high entropy alloys. Materials Science and Technology, 2015, 31, 1259-1263.	0.8	70
260	Friction Stir Welding of Dissimilar Alloys. , 2015, , 43-69.		19
261	A Framework for Friction Stir Welding of Dissimilar Alloys and Materials. , 2015, , 15-33.		27
262	Nanomechanical Behavior of CoCrFeMnNi High-Entropy Alloy. Jom, 2015, 67, 2296-2302.	0.9	18
263	Friction Stir-Processed Thermally Stable Immiscible Nanostructured Alloys. Jom, 2015, 67, 2820-2827.	0.9	16
264	Effect of deposition energy on the microstructure and phase purity of pulsed laser deposited iron fluoride thin films. Applied Physics A: Materials Science and Processing, 2015, 120, 863-868.	1.1	2
265	Strength and ductility optimization of Mgâ€“Yâ€“Ndâ€“Zr alloy by microstructural design. International Journal of Plasticity, 2015, 68, 77-97.	4.1	60
266	Friction stir additive manufacturing for high structural performance through microstructural control in an Mg based WE43 alloy. Materials & Design, 2015, 65, 934-952.	5.1	200
267	High Performance Mg6Zn Nanocomposites Fabricated through Friction Stir Processing. , 2015, , 383-386.		2
268	Energy, Exergy and Sustainability Analysis of Two-stage Vapour Compression Refrigeration System. Journal of Thermal Engineering, 2015, 1, 440.	0.8	15
269	THERMODYNAMIC ANALYSES OF MULTIPLE EVAPORATORS VAPOR COMPRESSION REFRIGERATION SYSTEMS WITH R410A, R290, R1234YF, R502, R404A, R152A AND R134A. International Journal of Air-Conditioning and Refrigeration, 2014, 22, 1450003.	0.8	10
270	Strength versus ductility in carbon nanotube reinforced nickel matrix nanocomposites. Journal of Materials Research, 2014, 29, 761-769.	1.2	31

#	Article	IF	Citations
271	Synthesis of Al0.5CoCrCuFeNi and Al0.5CoCrFeMnNi High-Entropy Alloys by Laser Melting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1603-1607.	1.0	12
272	Reliability-based fatigue life investigation for a medium-scale composite hydrokinetic turbine blade. Ocean Engineering, 2014, 89, 230-242.	1.9	28
273	Performance of a hydrokinetic energy system using an axial-flux permanent magnet generator. Energy, 2014, 65, 631-638.	4.5	24
274	Plastic deformation behavior of ultrafine-grained Alâ€“Mgâ€“Sc alloy. Journal of Materials Science, 2014, 49, 4202-4214.	1.7	15
275	Comparison of the Crystallization Behavior of Fe-Si-B-Cu and Fe-Si-B-Cu-Nb-Based Amorphous Soft Magnetic Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2998-3009.	1.1	23
276	On the Role of C Addition on Î± Precipitation in a Î² Titanium Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 1089-1095.	1.1	6
277	Effect of microstructure on the uniaxial tensile deformation behavior of Mgâ€“4Yâ€“3RE alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 116-131.	2.6	55
278	Tool wear mechanisms in friction stir welding of Tiâ€“6Alâ€“4V alloy. Wear, 2014, 321, 25-32.	1.5	89
279	Serration behavior and shear band characteristics during tensile deformation of an ultrafine-grained 5024 Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 616, 189-195.	2.6	13
280	Role of applied uniaxial stress during creep testing on precipitation in Mgâ€“Nd alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 612, 140-152.	2.6	23
281	A Preliminary Study of Deformation Behavior of Friction Stir Welded Ti-6Al-4V. Journal of Materials Engineering and Performance, 2014, 23, 3027-3033.	1.2	15
282	An Evaluation of Creep Behaviour in Friction Stir Welded MA754 Alloy. Journal of Materials Engineering and Performance, 2014, 23, 3159-3164.	1.2	10
283	Laser-Deposited In Situ TiC-Reinforced Nickel Matrix Composites: 3D Microstructure and Tribological Properties. Jom, 2014, 66, 935-942.	0.9	28
284	Discontinuous Precipitation of Î³â€² Phase in Ni-Co-Al Alloys. Jom, 2014, 66, 1465-1470.	0.9	9
285	Integrated Computational Materials Engineering (ICME) Approach to Design of Novel Microstructures for Ti-Alloys. Jom, 2014, 66, 1287-1298.	0.9	27
286	Point-by-point compositional analysis for atom probe tomography. MethodsX, 2014, 1, 12-18.	0.7	17
287	Integrated experimental and theoretical approach for corrosion and wear evaluation of laser surface nitrided, Tiâ€“6Alâ€“4V biomaterial in physiological solution. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 37, 153-164.	1.5	22
288	Compositional Analysis of as-cast and Crystallized Pd₄₃Cu₂₇Ni₁₀P₂₀ Bulk Metallic Glass. Microscopy and Microanalysis, 2014, 20, 814-815.	0.2	1

#	Article	IF	Citations
289	Influence of strain and strain rate on microstructural evolution during superplasticity of Mgâ€“Alâ€“Zn sheet. Journal of Materials Science, 2013, 48, 5633-5644.	1.7	8
290	Precipitation in Uniaxially Stressed Mg-Nd Alloys During Creep Testing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2905-2909.	1.1	12
291	The Influence of Precipitation of Alpha2 on Properties and Microstructure in TIMETAL 6-4. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1706-1713.	1.1	26
292	Ultrafine-Grained Al-Mg-Sc Alloy via Friction-Stir Processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 934-945.	1.1	30
293	Macro- and Microstructural Studies of Laser-Processed WE43 (Mg-Y-Nd) Magnesium Alloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 1190-1200.	1.0	13
294	Effect of inhomogeneous deformation on anisotropy of AZ31 magnesium sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 567, 101-109.	2.6	33
295	Additivity of strengthening mechanisms in ultrafine grained Alâ€“Mgâ€“Sc alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 580, 175-183.	2.6	92
296	Stress corrosion cracking susceptibility of ultrafine grained Alâ€“Mgâ€“Sc alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 565, 80-89.	2.6	55
297	Superplastic behavior and microstructural stability of friction stir processed AZ91C alloy. Journal of Materials Science, 2013, 48, 2635-2646.	1.7	29
298	Microstructural evolution and mechanical properties of friction stir welded ODS alloy MA754. Journal of Nuclear Materials, 2013, 442, 1-6.	1.3	28
299	Achieving High Strength and High Ductility in Friction Stir-Processed Cast Magnesium Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3675-3684.	1.1	43
300	Microstructure and mechanical properties of a friction stir processed Tiâ€“6Alâ€“4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 573, 67-74.	2.6	72
301	Superplasticity and microstructural stability in a Mg alloy processed by hot rolling and friction stir processing. Scripta Materialia, 2013, 68, 447-450.	2.6	37
302	Evolution of Microstructure and Texture in Friction Stir Processed Al-Mg-Mn Alloy. Materials Science Forum, 2013, 753, 247-250.	0.3	11
303	High strain rate superplasticity in friction stir processed ultrafine grained Mgâ€“Alâ€“Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 562, 69-76.	2.6	80
304	Microstructure and mechanical properties of friction stir welded oxide dispersion strengthened alloy. Journal of Nuclear Materials, 2013, 432, 274-280.	1.3	46
305	Study of Î²-precipitates and their effect on the directional yield asymmetry of friction stir processed and aged AZ91C alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 560, 500-509.	2.6	40
306	Effect of friction stir processing on the tensile and fatigue behavior of a cast A206 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 561, 159-166.	2.6	28

#	Article	IF	Citations
307	Laser deposited biocompatible Caâ€“P coatings on Tiâ€“6Alâ€“4V: Microstructural evolution and thermal modeling. Materials Science and Engineering C, 2013, 33, 165-173.	3.8	27
308	Processing, Microstructure and Mechanical Property Correlation in Al-B4C Surface Composite Produced via Friction Stir Processing. , 2013, , 39-46.		8
309	Magnesium Based Composite Via Friction Stir Processing. , 2013, , 245-252.		4
310	Effect of Initial Microstructure on the Microstructural Evolution and Joint Efficiency of a We43 Alloy During Friction Stir Welding. , 2013, , 253-261.		0
311	Ultrasonic underwater transmission of composite turbine blade structural health. , 2012, , .		3
312	Thermal stability of friction stir processed ultrafine grained AlMgSc alloy. Materials Characterization, 2012, 74, 1-10.	1.9	36
313	In situ nitridation of titaniumâ€“molybdenum alloys during laser deposition. Journal of Materials Science, 2012, 47, 7157-7166.	1.7	24
314	Coupled motion of [10â¯10] tilt boundaries in magnesium bicrystals. Philosophical Magazine, 2012, 92, 1499-1522.	0.7	15
315	Corrosion behavior of a friction stir processed rare-earth added magnesium alloy. Corrosion Science, 2012, 58, 321-326.	3.0	143
316	Effects of grain size on the corrosion resistance of wrought magnesium alloys containing neodymium. Corrosion Science, 2012, 58, 145-151.	3.0	380
317	Stress-induced selective nano-crystallization in laser-processed amorphous Feâ€“Siâ€“B alloys. Philosophical Magazine Letters, 2012, 92, 617-624.	0.5	29
318	Grain size and texture effects on deformation behavior of AZ31 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 558, 716-724.	2.6	111
319	In Situ Laser Synthesis of Fe-Based Amorphous Matrix Composite Coating on Structural Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4957-4966.	1.1	45
320	Stress corrosion cracking susceptibility of ultrafine grained AZ31. Journal of Materials Science, 2012, 47, 6812-6822.	1.7	30
321	Process Optimization for Friction-Stir-Welded Martensitic Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1966-1975.	1.1	21
322	Hot deformation behavior of friction-stir processed strip-cast 5083 aluminum alloys with different Mn contents. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 186-192.	2.6	30
323	Material flow and microstructural evolution during friction stir spot welding of AZ31 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 543, 200-209.	2.6	78
324	Transition of deformation behavior in an ultrafine grained magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 549, 123-127.	2.6	25

#	Article	IF	Citations
325	Tool Load and Torque Study for Portable Friction Stir Welding in Aluminum. , 2011, , 373-379.		3
326	Ultrathin alumina-coated carbon nanotubes as an anode for high capacity Li-ion batteries. Journal of Materials Chemistry, 2011, 21, 13621.	6.7	64
327	Synthesis and characterization of self-organized multilayered grapheneâ€“carbon nanotube hybrid films. Journal of Materials Chemistry, 2011, 21, 7289.	6.7	55
328	Friction stir lap welded advanced high strength steels: Microstructure and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8111-8119.	2.6	70
329	A study on the combined effect of forging and aging in Mgâ€“Yâ€“RE alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 28-35.	2.6	72
330	A stressâ€“strain model for a two-phase ultrafine-grained aluminum alloy. Scripta Materialia, 2011, 64, 57-60.	2.6	9
331	Critical grain size for change in deformation behavior in ultrafine grained Alâ€“Mgâ€“Sc alloy. Scripta Materialia, 2011, 64, 576-579.	2.6	57
332	Effect of texture on the mechanical behavior of ultrafine grained magnesium alloy. Scripta Materialia, 2011, 64, 580-583.	2.6	119
333	Influence of grain size and texture on Hallâ€“Petch relationship for a magnesium alloy. Scripta Materialia, 2011, 65, 994-997.	2.6	343
334	Characterization of high cycle fatigue behavior of a new generation aluminum lithium alloy. Acta Materialia, 2011, 59, 5946-5960.	3.8	59
335	The effect of friction stir processing on the microstructure and mechanical properties of equal channel angular pressed 5052Al alloy sheet. Journal of Materials Science, 2011, 46, 5527-5533.	1.7	14
336	Effect of tool design and process parameters on properties of Al alloy 6016 friction stir spot welds. Journal of Materials Processing Technology, 2011, 211, 972-977.	3.1	133
337	Development of nanocrystalline structure in Cu during friction stir processing (FSP). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5458-5464.	2.6	85
338	Grain Boundary Behavior in an Ultrafine-Grained Aluminum Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3558-3561.	1.1	0
339	Probabilistic fatigue life prediction model for alloys with defects: Applied to A206. Acta Materialia, 2011, 59, 3447-3462.	3.8	24
340	Process forces during friction stir channeling in an aluminum alloy. Journal of Materials Processing Technology, 2011, 211, 305-311.	3.1	54
341	Microstructure and mechanical behavior of friction stir processed ultrafine grained Alâ€“Mgâ€“Sc alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5883-5887.	2.6	81
342	Friction stir welding of precipitation strengthened aluminium alloys: Scope and challenges. Science and Technology of Welding and Joining, 2011, 16, 343-347.	1.5	43

#	Article	IF	Citations
343	Numerical investigation and evaluation of optimum hydrodynamic performance of a horizontal axis hydrokinetic turbine. Journal of Renewable and Sustainable Energy, 2011, 3, .	0.8	25
344	Microstructure and Mechanical Properties of Mg-1.7Y-1.2Zn Sheet Processed by Hot Rolling and Friction Stir Processing. , 2011, , 565-570.		1
345	Effect of Heat Index on Microstructure and Mechanical Behavior of Friction Stir Processed AZ31. , 2011, , 205-209.		1
346	Effect of process parameters on abnormal grain growth during friction stir processing of a cast Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 189-199.	2.6	53
347	Influence of Texture on Mechanical Behavior of Friction-Stir-Processed Magnesium Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 13-17.	1.1	61
348	Effect of Friction Stir Processing on Microstructure and Mechanical Properties of a Cast-Magnesiumâ€“Rare Earth Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 73-84.	1.1	73
349	Effect of Friction Stir Processing on Microstructure and Tensile Properties of an Investment Cast Al-7Si-0.6Mg Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2507-2521.	1.1	42
350	Analysis of microstructural evolution during friction stir welding of ultrahigh-strength steel. Scripta Materialia, 2010, 63, 851-854.	2.6	103
351	Investigation of creep threshold stresses using in situ TEM straining experiment in an Alâ€“5Y2O3â€“10SiC composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 2390-2397.	2.6	16
352	Influence of fraction of high angle boundaries on the mechanical behavior of an ultrafine grained Alâ€“Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5246-5254.	2.6	126
353	Microstructural evolution during fatigue of ultrafine grained aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7719-7730.	2.6	20
354	Effect of friction stir processing on fatigue behavior of an investment cast Alâ€“7Siâ€“0.6 Mg alloy. Acta Materialia, 2010, 58, 989-1003.	3.8	84
355	Superplastic deformation mechanism of an ultrafine-grained aluminum alloy produced by friction stir processing. Acta Materialia, 2010, 58, 4693-4704.	3.8	135
356	Development of a Mechanistic Model for Friction Stir Channeling. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2010, 132, .	1.3	10
357	Study of friction stir joining of thin aluminium sheets in lap joint configuration. Science and Technology of Welding and Joining, 2010, 15, 70-75.	1.5	66
358	Process forces during friction stir welding of aluminium alloys. Science and Technology of Welding and Joining, 2009, 14, 141-145.	1.5	40
359	Influence of process parameters on microstructural evolution and mechanical properties in friction stirred Al-2024 (T3) alloy. Science and Technology of Welding and Joining, 2009, 14, 346-355.	1.5	44
360	Effect of microstructure on fatigue life and fracture morphology in an aluminum alloy. Scripta Materialia, 2009, 60, 500-503.	2.6	77

#	Article	IF	Citations
361	High strain rate superplasticity in continuous cast Alâ€“Mg alloys prepared via friction stir processing. Scripta Materialia, 2009, 60, 850-853.	2.6	95
362	Effect of stress ratio on the fatigue behavior of a friction stir processed cast Alâ€“Siâ€“Mg alloy. Scripta Materialia, 2009, 61, 992-995.	2.6	40
363	Sinterbonding cobalt-cemented tungsten carbide to tungsten heavy alloys. International Journal of Refractory Metals and Hard Materials, 2009, 27, 835-841.	1.7	17
364	Phase separation in immiscible silverâ€“copper alloy thin films. Journal of Materials Science, 2009, 44, 3393-3401.	1.7	28
365	Dislocation-particle interaction at elevated temperatures. Jom, 2009, 61, 52-55.	0.9	9
366	Observation of Shear Thickening during Compressive Flow of Mg54Y11Ag7Cu28 in the Supercooled Liquid Region. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1-3.	1.1	0
367	Superplastic behavior of micro-regions in two-pass friction stir processed 7075Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 505, 70-78.	2.6	70
368	Deformation behavior of an ultrafine-grained Alâ€“Niâ€“Yâ€“Coâ€“Sc alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 513-514, 239-246.	2.6	5
369	Friction stir channeling: Characterization of the channels. Journal of Materials Processing Technology, 2009, 209, 3696-3704.	3.1	43
370	Peening effects on mechanical properties in friction stir welded AA 2195 at elevated and cryogenic temperatures. Materials & Design, 2009, 30, 3165-3173.	5.1	18
371	Constitutive Models for Superplastic Flow. , 2009, , 472-477.		1
372	Early Stages of Crystallization in Phase-Separated Amorphous Copper-Niobium Alloy Thin Films. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 1578-1584.	1.1	15
373	Incipient Plasticity and Shear Band Formation in Bulk Metallic Glass Studied Using Indentation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 1552-1559.	1.1	16
374	Structureâ€“property correlations in Al 7050 and Al 7055 high-strength aluminum alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 478, 163-172.	2.6	324
375	Effect of temperature and strain rate on tensile behavior of ultrafine-grained aluminum alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 494, 247-252.	2.6	12
376	Abnormal grain growth in friction stir processed alloys. Scripta Materialia, 2008, 58, 367-371.	2.6	148
377	A conceptual model for the process variables related to heat generation in friction stir welding of aluminum. Scripta Materialia, 2008, 58, 327-331.	2.6	83
378	Fatigue crack growth behavior of friction stir processed aluminum alloy. Scripta Materialia, 2008, 59, 395-398.	2.6	47

#	Article	IF	Citations
379	Mechanical behavior of devitrified ultrafine-grained Alâ€“4.0Yâ€“4.0Niâ€“0.9Co matrix composites. Scripta Materialia, 2008, 59, 1079-1082.	2.6	5
380	The microstructure and electrical transport properties of immiscible copper-niobium alloy thin films. Journal of Applied Physics, 2008, 103, 033511.	1.1	13
381	Development of a Reversible Bending Fatigue Test Bed to Evaluate Bulk Properties Using Sub-Size Specimens. Journal of Testing and Evaluation, 2008, 36, 402-405.	0.4	4
382	Preliminary Study of Pressure Drop and Heat Transfer Through a Friction Stir Channel. , 2007, , 933.		6
383	Effect of initial temper on mechanical properties of friction stir welded Al-2024 alloy. Science and Technology of Welding and Joining, 2007, 12, 334-340.	1.5	24
384	Enhanced superplasticity through friction stir processing in continuous cast AA5083 aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 464, 351-357.	2.6	55
385	Finite element simulation of selective superplastic forming of friction stir processed 7075 Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 463, 245-248.	2.6	29
386	Multiple passes of friction stir processing for the creation of superplastic 7075 aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 464, 255-260.	2.6	139
387	Properties of friction stir-processed Al 1100â€“NiTi composite. Scripta Materialia, 2007, 56, 541-544.	2.6	107
388	Friction stir welding of devitrified Alâ€“4.0Yâ€“4.0Niâ€“0.9Co alloy produced by amorphous powders. Scripta Materialia, 2007, 56, 971-974.	2.6	8
389	Ductility improvement in devitrified ultrafine-grained Alâ€“4.0Yâ€“4.0Niâ€“0.9Co alloy via hot rolling. Scripta Materialia, 2007, 56, 923-925.	2.6	6
390	A Cost Model for the Metal Inert Gas (MIG) Welding Process. , 2007, , .		1
391	Superplasticity and Superplastic Forming. , 2007, , 14-1-14-35.		0
392	Effect of friction stir processing on the microstructure of cast A356 aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 433, 269-278.	2.6	180
393	Comparison of incipient plasticity in bcc and fcc metals studied using nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 426, 208-213.	2.6	35
394	Characterization of the effects of friction stir processing on microstructural changes in DRA composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 428, 80-90.	2.6	31
395	The mechanics of biological materials. Jom, 2006, 58, 34-34.	0.9	0
396	Microstructural modification of as-cast Al-Si-Mg alloy by friction stir processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 3323-3336.	1.1	181

#	Article	IF	Citations
397	Effect of multiple-pass friction stir processing on microstructure and tensile properties of a cast aluminumâ€“silicon alloy. Scripta Materialia, 2006, 54, 1623-1626.	2.6	163
398	Upper critical field in nanostructured Nb: Competing effects of the reduction in density of states and the mean free path. Physical Review B, 2006, 74, .	1.1	66
399	Survivability of single-walled carbon nanotubes during friction stir processing. Nanotechnology, 2006, 17, 3081-3084.	1.3	67
400	Friction stir welding and processing. Materials Science and Engineering Reports, 2005, 50, 1-78.	14.8	5,241
401	Deep cup forming by superplastic punch stretching of friction stir processed 7075 Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 395, 173-179.	2.6	30
402	Laminated metal compositesâ€”High temperature deformation behavior. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 403, 17-24.	2.6	7
403	Creep behavior of extruded Alâ€“6Mgâ€“1Scâ€“1Zrâ€“10vol.% SiCp composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 53-57.	2.6	7
404	Low temperature superplasticity in a friction-stir-processed ultrafine grained Alâ€“Znâ€“Mgâ€“Sc alloy. Acta Materialia, 2005, 53, 4211-4223.	3.8	171
405	Elevated temperature deformation behavior of nanostructured Al?Ni?Gd?Fe alloys. Scripta Materialia, 2005, 52, 887-891.	2.6	11
406	Development of ultrafine-grained microstructure and low temperature (0.48 Tm) superplasticity in friction stir processed Alâ€“Mgâ€“Zr. Scripta Materialia, 2005, 53, 75-80.	2.6	111
407	Friction stir microforming of superplastic alloys. Microsystem Technologies, 2005, 11, 226-229.	1.2	8
408	Approaches toward integrating functionality into structural materials. Jom, 2005, 57, 17-17.	0.9	0
409	Effect of friction stir processing on the kinetics of superplastic deformation in an Al-Mg-Zr alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 1447-1458.	1.1	57
410	Evaluation of microstructure and superplasticity in friction stir processed 5083 Al alloy. Journal of Materials Research, 2004, 19, 3329-3342.	1.2	76
411	Effect of particle size distribution on strength of precipitation-hardened alloys. Journal of Materials Research, 2004, 19, 2765-2773.	1.2	36
412	Superplasticity in cast A356 induced via friction stir processing. Scripta Materialia, 2004, 50, 931-935.	2.6	131
413	Effect of friction stir processing on fatigue behavior of A356 alloy. Scripta Materialia, 2004, 51, 237-241.	2.6	198
414	Microstructural optimization of alloys using a genetic algorithm. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 372, 213-220.	2.6	35

#	Article	IF	Citations
415	Microstructure characterization and creep deformation of an Al-10 Wt Pct Ti-2 Wt Pct Cu nanocomposite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 3855-3861.	1.1	21
416	Creep behavior and threshold stress of an extruded Alâ€“6Mgâ€“2Scâ€“1Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 381, 381-385.	2.6	29
417	Strengthening mechanisms in Tiâ€“Nbâ€“Zrâ€“Ta and Tiâ€“Moâ€“Zrâ€“Fe orthopaedic alloys. Biomaterials, 2004, 25, 3413-3419.	5.7	193
418	Title is missing!. Plant Cell, Tissue and Organ Culture, 2003, 73, 21-35.	1.2	67
419	Friction stir processing: a novel technique for fabrication of surface composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 341, 307-310.	2.6	904
420	High strain rate superplasticity in friction stir processed Alâ€“Mgâ€“Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 351, 148-153.	2.6	124
421	High strain rate superplasticity in a commercial 2024 Al alloy via friction stir processing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 359, 290-296.	2.6	220
422	Microstructural investigation of friction stir welded 7050-T651 aluminium. Acta Materialia, 2003, 51, 713-729.	3.8	894
423	Cavitation in superplastic 7075Al alloys prepared via friction stir processing. Acta Materialia, 2003, 51, 3551-3569.	3.8	70
424	Microstructural Modification of Cast Aluminum Alloys via Friction Stir Processing. Materials Science Forum, 2003, 426-432, 2891-2896.	0.3	67
425	Microstructural Modification and Resultant Properties of Friction Stir Processed Cast NiAl Bronze. Materials Science Forum, 2003, 426-432, 2843-2848.	0.3	45
426	Processing and microstructural characterization of sputter-deposited Ni/Ni3Al multilayered thin films. Journal of Materials Research, 2003, 18, 979-987.	1.2	11
427	Multi-sheet structures in 7475 aluminum by friction stir welding in concert with post-weld superplastic forming. Scripta Materialia, 2002, 47, 631-636.	2.6	108
428	Superplastic deformation behaviour of friction stir processed 7075Al alloy. Acta Materialia, 2002, 50, 4419-4430.	3.8	387
429	High-temperature creep behavior of TiC particulate reinforced Tiâ€“6Alâ€“4V alloy composite. Acta Materialia, 2002, 50, 4293-4302.	3.8	90
430	Superplasticity. , 2001, , 8977-8981.		3
431	TEM/HREM observations of nanostructured superplastic Ni₃Al. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2001, 81, 25-36.	0.8	54
432	High-strain-rate superplasticity from nanocrystalline Al alloy 1420 at low temperatures. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2001, 81, 37-48.	0.8	97

#	Article	IF	Citations
433	Processing commercial aluminum alloys for high strain rate superplasticity. Jom, 2001, 53, 23-26.	0.9	15
434	Mechanical behavior and superplasticity of a severe plastic deformation processed nanocrystalline Tiâ€“6Alâ€“4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 298, 44-50.	2.6	143
435	Processing of high hardness-high toughness alumina matrix nanocomposites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 301, 97-101.	2.6	35
436	Enhanced superplastic properties in bulk metastable nanostructured alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 304-306, 206-210.	2.6	46
437	Friction stir processing: a tool to homogenize nanocomposite aluminum alloys. Scripta Materialia, 2001, 44, 61-66.	2.6	239
438	Friction Stir Processing: A New Grain Refinement Technique to Achieve High Strain Rate Superplasticity in Commercial Alloys. Materials Science Forum, 2001, 357-359, 507-514.	0.3	235
439	Development of Ultrafine Grained Materials Using The MAXStrain^{Â®} Technology. Materials Science Forum, 2001, 357-359, 425-430.	0.3	14
440	High-strain-rate superplasticity from nanocrystalline Al alloy 1420 at low temperatures. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2001, 81, 37-48.	0.8	8
441	Processing and Properties of Ceramic Nanocomposites Produced from Polymer Precursor Pyrolysis, High Pressure Sintering and Spark Plasma Sintering. Materials Research Society Symposia Proceedings, 2000, 634, 721.	0.1	0
442	Electric pulse assisted rapid consolidation of ultrafine grained alumina matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 287, 178-182.	2.6	55
443	An analysis of the role of grain size on superplasticity of Î³ titanium aluminides. Journal of Materials Science, 2000, 35, 147-151.	1.7	6
444	High strain rate superplasticity in microcrystalline and nanocrystalline materials. Materials Science and Technology, 2000, 16, 1340-1344.	0.8	6
445	Phase evolution during crystallization of sputter-deposited amorphous titaniumâ€“aluminium alloy thin films: Dimensional and solute effects. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2000, 80, 1715-1727.	0.8	10
446	Tensile Superplasticity in Nanocrystalline Materials Produced by Severe Plastic Deformation. , 2000, , 231-240.		2
447	Observations of low-temperature superplasticity in electrodeposited ultrafine grained nickel. Materials Letters, 2000, 45, 345-349.	1.3	59
448	Analysis of Tensile Superplasticity in Nanomaterials. Materials Science Forum, 1999, 304-306, 31-38.	0.3	18
449	Low-temperature superplasticity in nanostructured nickel and metal alloys. Nature, 1999, 398, 684-686.	13.7	589
450	Deformation mechanisms and tensile superplasticity in nanocrystalline materials. Jom, 1999, 51, 37-40.	0.9	41

#	Article	IF	Citations
451	Designing DRA composites for high creep strength. Jom, 1999, 51, 65-68.	0.9	5
452	Severe plastic deformation processing and high strain rate superplasticity in an aluminum matrix composite. Scripta Materialia, 1999, 40, 1151-1155.	2.6	32
453	High strain rate superplasticity in a friction stir processed 7075 Al alloy. Scripta Materialia, 1999, 42, 163-168.	2.6	734
454	Recent Developments in Superplasticity. Materials Research Society Symposia Proceedings, 1999, 601, 153.	0.1	2
455	Preparation of a ZrO₂â€“Al₂O₃ nanocomposite by high-pressure sintering of spray-pyrolyzed powders. Journal of Materials Research, 1999, 14, 834-840.	1.2	17
456	Effect of stressed pre-exposure on the creep strengthening of a 2009 Al-SiCw composite. Scripta Materialia, 1998, 38, 1819-1824.	2.6	4
457	Dense nanometric ZrO2î—¸Al2O3 from spray-pyrolysed powders. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1998, 133, 25-31.	2.3	11
458	Tensile superplasticity in a nanocrystalline nickel aluminide. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 252, 174-178.	2.6	93
459	Influence of initial crystal structure and electrical pulsing on densification of nanocrystalline alumina powder. Journal of Materials Research, 1998, 13, 86-89.	1.2	52
460	Processing and Mechanical Properties of Nanocrystalline Alloys Prepared by Severe Plastic Deformation. Materials Science Forum, 1998, 269-272, 969-974.	0.3	14
461	Comparative Structural Studies of nanocrystalline Materials Processed by Different Techniques. Materials Science Forum, 1997, 235-238, 497-506.	0.3	13
462	Some Critical Aspects of High Strain Rate Superplasticity. Materials Science Forum, 1997, 233-234, 217-234.	0.3	13
463	Superplasticity in Intermetallics. Materials Science Forum, 1997, 243-245, 609-618.	0.3	10
464	Saturation magnetization and Curie temperature of nanocrystalline nickel. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1997, 75, 803-811.	0.6	34
465	The observation of tensile superplasticity in nanocrystalline materials. Scripta Materialia, 1997, 9, 473-476.	0.5	41
466	Mechanism of high strain rate superplasticity in aluminium alloy composites. Acta Materialia, 1997, 45, 561-568.	3.8	98
467	Steady state creep behaviour of an AlAl2O3 alloy. Acta Materialia, 1997, 45, 1297-1306.	3.8	34
468	The rate controlling deformation mechanism in high strain rate superplasticity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 1023-1025.	2.6	17

#	Article	IF	Citations
469	High temperature deformation behavior of a nanocrystalline titanium aluminide. Scripta Materialia, 1996, 34, 1765-1769.	2.6	15
470	Influence of temperature on segregation in 2009 Al-SiCw composite and its implication on high strain rate superplasticity. Scripta Materialia, 1996, 35, 247-252.	2.6	11
471	Superplasticity in Hard-To-Machine Materials. Annual Review of Materials Research, 1996, 26, 75-106.	5.5	10
472	Mechanical Behavior and Constitutive Modeling During High Temperature Deformation of Al Laminated Metal Composites. Materials Research Society Symposia Proceedings, 1996, 434, 267.	0.1	1
473	Rapid Consolidation of Nanophase Al2O3 and an Al2O3/Al2TiO5 Composite. Materials Research Society Symposia Proceedings, 1996, 457, 347.	0.1	2
474	Nanocrystalline Alumina by High Pressure Sintering. Materials Science Forum, 1996, 225-227, 617-622.	0.3	14
475	Effect of a solid solution on the steady-state creep behavior of an aluminum matrix composite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 305-316.	1.1	31
476	High-strain-rate superplasticity in aluminum-matrix composites. Jom, 1996, 48, 52-57.	0.9	10
477	Effect of isothermal heat treatment on the creep behaviour of an Alî—¸TiCp composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 206, 270-278.	2.6	29
478	Steady state creep behaviour of particulate-reinforced titanium matrix composites. Acta Materialia, 1996, 44, 927-935.	3.8	81
479	Effect of testing environment on intergranular microsuperplasticity in an aluminum MMC. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 220, 78-84.	2.6	10
480	High-Pressure Sintering of Nanocrystalline gammaAl2O3. Journal of the American Ceramic Society, 1996, 79, 2989-2992.	1.9	115
481	Fully Dense Nanocrystalline Nickel by Severe Plastic Deformation Consolidation. Materials Science Forum, 1996, 225-227, 605-610.	0.3	5
482	The Origin of High Strain Rate Superplasticity. Materials Science Forum, 1996, 243-245, 315-320.	0.3	9
483	Flow Behavior of Partially Dense Nanocrystalline Alumina. Materials Science Forum, 1996, 225-227, 611-616.	0.3	2
484	Dimensionally Induced Structural transformations in Titanium-Aluminum Multilayers. Physical Review Letters, 1996, 76, 3778-3781.	2.9	73
485	Microstructure and deformation of TiB + Ti₂C reinforced titanium matrix composites. Materials Science and Technology, 1996, 12, 219-226.	0.8	19
486	Effect of TiO2 doping on rapid densification of alumina by plasma activated sintering. Journal of Materials Research, 1996, 11, 1144-1148.	1.2	35

#	Article	IF	Citations
487	Microstructure and deformation of TiB + Ti₂C reinforced titanium matrix composites. Materials Science and Technology, 1996, 12, 219-226.	0.8	16
488	Primary creep in a Ti-25Al-11Nb alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 192-193, 756-762.	2.6	15
489	Surface cracking during creep of a Ti-25Al-11Nb alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 192-193, 763-768.	2.6	2
490	An evaluation of steady state creep mechanism in an Al-Mg/26 Al2O3f composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 201, 205-210.	2.6	21
491	Effect of grain boundary orientation on creep behaviour of directionally solidified nickel base superalloy (CM 247 LC alloy). Materials Science and Technology, 1995, 11, 341-346.	0.8	6
492	Superplasticity in powder metallurgy aluminum alloys and composites. Acta Metallurgica Et Materialia, 1995, 43, 877-891.	1.9	252
493	Instantaneous strain measurements during high-temperature stress cycling of a dispersion-strengthened niobium alloy. Scripta Metallurgica Et Materialia, 1995, 32, 1725-1730.	1.0	0
494	Microstructure of a creep tested Al-20 vol.% SiC composite. Scripta Metallurgica Et Materialia, 1995, 33, 479-484.	1.0	14
495	The effect of aluminium on the creep behaviour of titanium aluminide alloys. Scripta Metallurgica Et Materialia, 1995, 32, 851-856.	1.0	23
496	Plasma activated sintering of nanocrystalline Î³-Al2O3. Scripta Materialia, 1995, 5, 525-544.	0.5	66
497	The threshold stress for creep controlled by dislocation-particle interaction. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1994, 69, 1097-1109.	0.8	44
498	The Role of Threshold Stresses and Incipient Melting in High Strain Rate Superplasticity. Materials Science Forum, 1994, 170-172, 65-70.	0.3	5
499	High-temperature creep of Alî—¸TiB2 particulate composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 189, 95-104.	2.6	49
500	Transient mechanisms in diffusional creep in a titanium aluminide. Scripta Metallurgica Et Materialia, 1994, 31, 1555-1560.	1.0	12
501	Creep fracture in Al-SiC metal-matrix composites. Journal of Materials Science, 1993, 28, 2943-2949.	1.7	27
502	Creep behaviour of an orthorhombic phase in a Tiî—¸Alî—¸Nb alloy. Scripta Metallurgica Et Materialia, 1993, 28, 569-574.	1.0	46
503	Creep of an Al[sbnd]Co[sbnd]Cu quasicrystal. Philosophical Magazine Letters, 1993, 68, 225-230.	0.5	1
504	On the anomalous creep behaviour of an XD Al-TiB2 composite. Scripta Metallurgica Et Materialia, 1993, 29, 1199-1204.	1.0	12

#	Article	IF	Citations
505	Steady state creep behaviour of a rapidly solidified and further processed Al-5 wt% Ti alloy. Acta Metallurgica Et Materialia, 1993, 41, 2243-2251.	1.9	37
506	Steady state creep behaviour of silicon carbide particulate reinforced aluminium composites. Acta Metallurgica Et Materialia, 1992, 40, 2045-2052.	1.9	236
507	Dislocation creep mechanism map for particle strengthened materials. Scripta Metallurgica Et Materialia, 1992, 26, 309-313.	1.0	29
508	On the superplastic behaviour of mechanically alloyed aluminium alloys. Scripta Metallurgica Et Materialia, 1992, 26, 1605-1608.	1.0	14
509	Microstructure and creep behaviour of laser surface alloyed aluminium. Scripta Metallurgica Et Materialia, 1992, 26, 1211-1214.	1.0	13
510	On superplasticity in silicon carbide reinforced aluminum composites. Scripta Metallurgica Et Materialia, 1991, 25, 271-275.	1.0	46
511	Creep of Pbâ€“2Â·5Sbâ€“0Â·2Sn alloy at low stresses. Materials Science and Technology, 1990, 6, 504-509.	0.8	2
512	Some observations on the high-temperature creep behavior of 6061 Al-SiC composites. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1990, 21, 2089-2090.	1.4	100
513	Microstructure and steady state creep in Ti-24Al-11Nb. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1990, 130, 151-164.	2.6	47
514	Influence of minor additions of Zr on the mechanical behaviour of a Mg/1bLi/1bAl alloy. Scripta Metallurgica Et Materialia, 1990, 24, 451-456.	1.0	9
515	On the influence of cooling rate in Î² solution treatment for a Tiî—‚25Alî—‚11Nb alloy. Scripta Metallurgica Et Materialia, 1990, 24, 1477-1482.	1.0	12
516	Creep of a low carbon steel at low stresses and intermediate temperatures. Acta Metallurgica Et Materialia, 1990, 38, 461-468.	1.9	9
517	Creep behaviour of an aluminium-silicon carbide particulate composite. Scripta Metallurgica Et Materialia, 1990, 24, 1565-1570.	1.0	60
518	On the threshold stress for diffusional creep in pure metals. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1989, 60, 581-590.	0.8	14
519	Some correlations between parameters relating to grain boundary self-diffusion in silver. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1989, 117, L21-L24.	2.6	0
520	An analysis of low stress creep data for coarse-grained pure lead. Materials Letters, 1989, 8, 187-189.	1.3	2
521	Effect of concurrent grain growth on the stress-strain rate curve of superplastic materials. Journal of Materials Science Letters, 1988, 7, 185-186.	0.5	5
522	An empirical correlation for the grain-boundary diffusion of impurities in copper. Journal of Materials Science Letters, 1988, 7, 728-730.	0.5	5

#	Article	IF	Citations
523	The stress-strain rate behaviour of superplastic Zn-Al eutectoid alloy. Journal of Materials Science, 1988, 23, 593-597.	1.7	10
524	Enhanced diffusional creep: The effect of grain growth. Scripta Metallurgica, 1988, 22, 323-327.	1.2	8
525	An analysis of grain-growth data in duplex materials on static annealing and during superplastic deformation. Journal of Materials Science, 1987, 22, 2153-2157.	1.7	3
526	Effect of Welding Parameters on Properties of 5052 Al Friction Stir Spot Welds. , 0, , .		31
527	An Analysis of Strength and Ductility of Ultrafine Grained Al Alloys. Materials Science Forum, 0, 633-634, 165-177.	0.3	1
528	Friction Stir Processing of Commercial Grade Marine Alloys to Enable Superplastic Forming. Key Engineering Materials, 0, 433, 141-151.	0.4	6
529	Directional Anisotropy in the Mechanical Behavior of Friction Stir Processed and Aged AZ91 Alloy. Materials Science Forum, 0, 702-703, 64-67.	0.3	4
530	Nickel-Chromium Alloys: Engineered Microstructure via Spark Plasma Sintering. Materials Science Forum, 0, 783-786, 1099-1104.	0.3	2
531	Thermodynamic mathematical modelling and analysis of vapour absorption refrigeration system using a novel ant lion optimiser. International Journal of Ambient Energy, 0, , 1-14.	1.4	0
532	Temperature Distribution and Welding Distortion Measurements After FSW of A1 6082-T6 Sheets. , 0, , 289-295.		1
533	Recovery of waste heat process through the various thermodynamic cycles: A critical review. WEENTECH Proceedings in Energy, 0, , 175-182.	0.0	0
534	Î± phase growth and branching in titanium alloys. Philosophical Magazine, 0, , 1-24.	0.7	1
535	Bulk Nanomaterials from Friction Stir Processing: Features and Properties. , 0, , 255-272.		0