

Peter K Liaw

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

280
papers

14,501
citations

58
h-index

115
g-index

297
ext. papers

19,022
ext. citations

5.3
avg, IF

7.16
L-index

#	Paper	IF	Citations
280	Microstructures and properties of high-entropy alloys. <i>Progress in Materials Science</i> , 2014 , 61, 1-93	42.2	3296
279	Deviation from high-entropy configurations in the atomic distributions of a multi-principal-element alloy. <i>Nature Communications</i> , 2015 , 6, 5964	17.4	416
278	Science and technology in high-entropy alloys. <i>Science China Materials</i> , 2018 , 61, 2-22	7.1	404
277	Alloy Design and Properties Optimization of High-Entropy Alloys. <i>Jom</i> , 2012 , 64, 830-838	2.1	390
276	High-entropy alloys with high saturation magnetization, electrical resistivity, and malleability. <i>Scientific Reports</i> , 2013 , 3, 1455	4.9	343
275	Metallic glass matrix composites. <i>Materials Science and Engineering Reports</i> , 2016 , 100, 1-69	30.9	341
274	Corrosion-Resistant High-Entropy Alloys: A Review. <i>Metals</i> , 2017 , 7, 43	2.3	329
273	Corrosion of Al CoCrFeNi high-entropy alloys: Al-content and potential scan-rate dependent pitting behavior. <i>Corrosion Science</i> , 2017 , 119, 33-45	6.8	310
272	High-entropy Al _{0.3} CoCrFeNi alloy fibers with high tensile strength and ductility at ambient and cryogenic temperatures. <i>Acta Materialia</i> , 2017 , 123, 285-294	8.4	262
271	Fatigue behavior of a wrought Al _{0.5} CoCrCuFeNi two-phase high-entropy alloy. <i>Acta Materialia</i> , 2015 , 99, 247-258	8.4	255
270	Enhanced strength-ductility synergy in ultrafine-grained eutectic high-entropy alloys by inheriting microstructural lamellae. <i>Nature Communications</i> , 2019 , 10, 489	17.4	251
269	Microstructures and properties of high-entropy alloy films and coatings: a review. <i>Materials Research Letters</i> , 2018 , 6, 199-229	7.4	184
268	Lattice distortion in a strong and ductile refractory high-entropy alloy. <i>Acta Materialia</i> , 2018 , 160, 158-172	8.4	173
267	Guidelines in predicting phase formation of high-entropy alloys. <i>MRS Communications</i> , 2014 , 4, 57-62	2.7	171
266	Understanding phase stability of Al-Co-Cr-Fe-Ni high entropy alloys. <i>Materials and Design</i> , 2016 , 109, 425-433	8.1	154
265	Tailoring magnetic behavior of CoFeMnNiX (X = Al, Cr, Ga, and Sn) high entropy alloys by metal doping. <i>Acta Materialia</i> , 2017 , 130, 10-18	8.4	143
264	Homogenization of Al CoCrFeNi high-entropy alloys with improved corrosion resistance. <i>Corrosion Science</i> , 2018 , 133, 120-131	6.8	143

263	Tensile ductility of an AlCoCrFeNi multi-phase high-entropy alloy through hot isostatic pressing (HIP) and homogenization. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 647, 229-240	5.3	137
262	Serration and noise behaviors in materials. <i>Progress in Materials Science</i> , 2017 , 90, 358-460	42.2	128
261	Promising properties and future trend of eutectic high entropy alloys. <i>Scripta Materialia</i> , 2020 , 187, 202-209	3.0	126
260	Large plasticity and tensile necking of Zr-based bulk-metallic-glass-matrix composites synthesized by the Bridgman solidification. <i>Applied Physics Letters</i> , 2009 , 94, 151905	3.4	123
259	Alloying and Processing Effects on the Aqueous Corrosion Behavior of High-Entropy Alloys. <i>Entropy</i> , 2014 , 16, 895-911	2.8	119
258	Mechanical behavior of high-entropy alloys. <i>Progress in Materials Science</i> , 2021 , 118, 100777	42.2	115
257	Synthesis and cyclic oxidation behavior of a (Ni, Pt) Al coating on a desulfurized Ni-base superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1999 , 30, 2679-2687	2.3	114
256	Effects of Pt incorporation on the isothermal oxidation behavior of chemical vapor deposition aluminide coatings. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001 , 32, 1727-1741	2.3	111
255	Two-glassy-phase bulk metallic glass with remarkable plasticity. <i>Applied Physics Letters</i> , 2007 , 91, 131903	3.4	107
254	Design of Light-Weight High-Entropy Alloys. <i>Entropy</i> , 2016 , 18, 333	2.8	105
253	Tuned critical avalanche scaling in bulk metallic glasses. <i>Scientific Reports</i> , 2014 , 4, 4382	4.9	99
252	Localized heating and fracture criterion for bulk metallic glasses. <i>Journal of Materials Research</i> , 2006 , 21, 915-922	2.5	95
251	Fracture resistance of high entropy alloys: A review. <i>Intermetallics</i> , 2018 , 99, 69-83	3.5	95
250	Fracture Toughness and Fatigue Crack Growth Behavior of As-Cast High-Entropy Alloys. <i>Jom</i> , 2015 , 67, 2288-2295	2.1	93
249	Microstructures and Crackling Noise of AlxNbTiMoV High Entropy Alloys. <i>Entropy</i> , 2014 , 16, 870-884	2.8	90
248	A cuboidal B2 nanoprecipitation-enhanced body-centered-cubic alloy Al _{0.7} CoCrFe ₂ Ni with prominent tensile properties. <i>Scripta Materialia</i> , 2016 , 120, 85-89	5.6	86
247	A review on the fatigue behavior of Ti-6Al-4V fabricated by electron beam melting additive manufacturing. <i>International Journal of Fatigue</i> , 2019 , 119, 173-184	5	86
246	High-velocity deformation of AlCoCrFeNi high-entropy alloy: Remarkable resistance to shear failure. <i>Scientific Reports</i> , 2017 , 7, 42742	4.9	85

245	Universal Quake Statistics: From Compressed Nanocrystals to Earthquakes. <i>Scientific Reports</i> , 2015 , 5, 16493	4.9	82
244	Experiments and Model for Serration Statistics in Low-Entropy, Medium-Entropy, and High-Entropy Alloys. <i>Scientific Reports</i> , 2015 , 5, 16997	4.9	81
243	Strong grain-size effect on deformation twinning of an Al _{0.1} CoCrFeNi high-entropy alloy. <i>Materials Research Letters</i> , 2017 , 5, 276-283	7.4	80
242	Chemical short-range orders and the induced structural transition in high-entropy alloys. <i>Scripta Materialia</i> , 2018 , 144, 64-68	5.6	78
241	Additive Manufacturing of High-Entropy Alloys: A Review. <i>Entropy</i> , 2018 , 20,	2.8	78
240	Recrystallization Behavior of CoCrCuFeNi High-Entropy Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 1481-1487	2.3	77
239	In-situ electrochemical-AFM study of localized corrosion of Al _x CoCrFeNi high-entropy alloys in chloride solution. <i>Applied Surface Science</i> , 2018 , 439, 533-544	6.7	76
238	Phase stability and transformation in a light-weight high-entropy alloy. <i>Acta Materialia</i> , 2018 , 146, 280-293	7.4	76
237	The BCC/B2 Morphologies in Al _x NiCoFeCr High-Entropy Alloys. <i>Metals</i> , 2017 , 7, 57	2.3	76
236	Phase stability and microstructures of high entropy alloys ion irradiated to high doses. <i>Journal of Nuclear Materials</i> , 2016 , 480, 100-108	3.3	73
235	Effects of sulfur impurity on the scale adhesion behavior of a desulfurized Ni-based superalloy aluminized by chemical vapor deposition. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998 , 29, 833-841	2.3	72
234	Characterization of the temperature evolution during high-cycle fatigue of the ULTIMET superalloy: Experiment and theoretical modeling. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001 , 32, 2279-2296	2.3	71
233	Excellent ductility and serration feature of metastable CoCrFeNi high-entropy alloy at extremely low temperatures. <i>Science China Materials</i> , 2019 , 62, 853-863	7.1	70
232	A Successful Synthesis of the CoCrFeNiAl _{0.3} Single-Crystal, High-Entropy Alloy by Bridgman Solidification. <i>Jom</i> , 2013 , 65, 1751-1758	2.1	69
231	Thin film metallic glasses: Preparations, properties, and applications. <i>Jom</i> , 2010 , 62, 19-24	2.1	68
230	Friction Stir Processing of a High Entropy Alloy Al _{0.1} CoCrFeNi. <i>Jom</i> , 2015 , 67, 1007-1013	2.1	67
229	Predictive multiphase evolution in Al-containing high-entropy alloys. <i>Nature Communications</i> , 2018 , 9, 4520	17.4	66
228	Strengthening in Al _{0.25} CoCrFeNi high-entropy alloys by cold rolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 707, 593-601	5.3	64

227	Anomalies in the deformation mechanism and kinetics of coarse-grained high entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 654, 256-263	5.3	63
226	Temperature Effects on Deformation and Serration Behavior of High-Entropy Alloys (HEAs). <i>Jom</i> , 2014 , 66, 2002-2008	2.1	62
225	Multistage work hardening assisted by multi-type twinning in ultrafine-grained heterostructural eutectic high-entropy alloys. <i>Materials Today</i> , 2020 , 41, 62-71	21.8	61
224	Mechanical, corrosion, and wear properties of biomedical Ti ₄₂ Nb ₁₇ Ta ₁₀ Mo high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2021 , 861, 157997	5.7	61
223	Hierarchical crack buffering triples ductility in eutectic herringbone high-entropy alloys. <i>Science</i> , 2021 , 373, 912-918	33.3	60
222	Nanoscale serration and creep characteristics of Al _{0.5} CoCrCuFeNi high-entropy alloys. <i>Journal of Alloys and Compounds</i> , 2018 , 752, 464-475	5.7	57
221	Understanding the Cu-Zn brass alloys using a short-range-order cluster model: significance of specific compositions of industrial alloys. <i>Scientific Reports</i> , 2014 , 4, 7065	4.9	57
220	Enhanced fatigue resistance of a nickel-based hastelloy induced by a surface nanocrystallization and hardening process. <i>Philosophical Magazine Letters</i> , 2005 , 85, 427-438	1	57
219	A novel bulk eutectic high-entropy alloy with outstanding as-cast specific yield strengths at elevated temperatures. <i>Scripta Materialia</i> , 2021 , 204, 114132	5.6	57
218	Deformation mechanisms in a precipitation-strengthened ferritic superalloy revealed by in situ neutron diffraction studies at elevated temperatures. <i>Acta Materialia</i> , 2015 , 83, 137-148	8.4	55
217	A 200nm thick glass-forming metallic film for fatigue-property enhancements. <i>Applied Physics Letters</i> , 2006 , 88, 131902	3.4	55
216	Electrochemical corrosion behavior of a Zr-based bulk-metallic glass. <i>Applied Physics Letters</i> , 2007 , 91, 041904	3.4	55
215	Rate dependence of shear banding and serrated flows in a bulk metallic glass. <i>Journal of Materials Research</i> , 2006 , 21, 2164-2167	2.5	54
214	Fatigue behavior of high-entropy alloys: A review. <i>Science China Technological Sciences</i> , 2018 , 61, 168-178.	8.5	53
213	Wear behavior of Al _{0.6} CoCrFeNi high-entropy alloys: Effect of environments. <i>Journal of Materials Research</i> , 2018 , 33, 3310-3320	2.5	53
212	First-principles and machine learning predictions of elasticity in severely lattice-distorted high-entropy alloys with experimental validation. <i>Acta Materialia</i> , 2019 , 181, 124-138	8.4	51
211	Gradient cell-structured high-entropy alloy with exceptional strength and ductility. <i>Science</i> , 2021 , 374, 984-989	33.3	49
210	Fundamental electronic structure and multiatomic bonding in 13 biocompatible high-entropy alloys. <i>Npj Computational Materials</i> , 2020 , 6,	10.9	48

209	First-principles prediction of high-entropy-alloy stability. <i>Npj Computational Materials</i> , 2017 , 3,	10.9	47
208	Temperature effects on the serrated behavior of an Al _{0.5} CoCrCuFeNi high-entropy alloy. <i>Materials Chemistry and Physics</i> , 2018 , 210, 20-28	4.4	45
207	Microstructural evolution of single Ni ₂ TiAl or hierarchical NiAl/Ni ₂ TiAl precipitates in Fe-Ni-Al-Cr-Ti ferritic alloys during thermal treatment for elevated-temperature applications. <i>Acta Materialia</i> , 2017 , 127, 1-16	8.4	44
206	Mechanical properties of the high-entropy alloy Ag _{0.5} CoCrCuFeNi at temperatures of 4.2B00 K. <i>Low Temperature Physics</i> , 2013 , 39, 630-632	0.7	44
205	Shear strain in a shear band of a bulk-metallic glass in compression. <i>Applied Physics Letters</i> , 2007 , 90, 181903	3.4	44
204	A Review of the Serrated-Flow Phenomenon and Its Role in the Deformation Behavior of High-Entropy Alloys. <i>Metals</i> , 2020 , 10, 1101	2.3	44
203	Coherent Precipitation and Strengthening in Compositionally Complex Alloys: A Review. <i>Entropy</i> , 2018 , 20,	2.8	42
202	Nanoindentation Creep Behavior of an Al _{0.3} CoCrFeNi High-Entropy Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 5871-5875	2.3	41
201	A Brief Review of High Entropy Alloys and Serration Behavior and Flow Units. <i>Journal of Iron and Steel Research International</i> , 2016 , 23, 2-6	1.2	40
200	Lattice-Distortion-Enhanced Yield Strength in a Refractory High-Entropy Alloy. <i>Advanced Materials</i> , 2020 , 32, e2004029	2.4	40
199	Tensile softening of metallic-glass-matrix composites in the supercooled liquid region. <i>Applied Physics Letters</i> , 2012 , 100, 121902	3.4	39
198	Temperature dependence of elastic and plastic deformation behavior of a refractory high-entropy alloy. <i>Science Advances</i> , 2020 , 6,	14.3	39
197	Effects of Temperature on Serrated Flows of Al _{0.5} CoCrCuFeNi High-Entropy Alloy. <i>Jom</i> , 2015 , 67, 2314-2320	3.8	38
196	Fundamental understanding of mechanical behavior of high-entropy alloys at low temperatures: A review. <i>Journal of Materials Research</i> , 2018 , 33, 2998-3010	2.5	38
195	Novel high entropy alloys of Fe _x Co _{1-x} NiMnGa with excellent soft magnetic properties. <i>Intermetallics</i> , 2018 , 100, 1-8	3.5	38
194	Temperature dependence of serrated flows in compression in a bulk-metallic glass. <i>Applied Physics Letters</i> , 2006 , 89, 261909	3.4	38
193	Infrared temperature mapping of ULTIMET alloy during high-cycle fatigue tests. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000 , 31, 1307-1310	2.3	38
192	In Situ Neutron-Diffraction Studies on the Creep Behavior of a Ferritic Superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 1497-1508	2.3	33

191	A thermodynamic interpretation of the size-ratio limits for laves phase formation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1999 , 30, 1449-1452	2.3	33
190	Influence of Strain Rate on Compressive Deformation Behavior of a Zr-Cu-Ni-Al Bulk Metallic Glass at Room Temperature. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 1491-1498	2.3	32
189	Structures and mechanical behaviors of Zr ₅₅ Cu ₃₅ Al ₁₀ bulk amorphous alloys at ambient and cryogenic temperatures. <i>Physical Review B</i> , 2006 , 74,	3.3	32
188	Effects of Constituent Elements and Fabrication Methods on Mechanical Behavior of High-Entropy Alloys: A Review. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 1-28	2.3	32
187	Characteristic length scales governing plasticity/brittleness of bulk metallic glasses at ambient temperature. <i>Applied Physics Letters</i> , 2010 , 96, 011905	3.4	31
186	Bio-corrosion behavior and in vitro biocompatibility of equimolar TiZrHfNbTa high-entropy alloy. <i>Intermetallics</i> , 2020 , 124, 106845	3.5	30
185	High-temperature mechanical behavior of Ti-6Al-4V alloy and TiC p /Ti-6Al-4V composite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1999 , 30, 1569-1578	2.3	30
184	Microstructures and mechanical properties of body-centered-cubic (Al,Ti) _{0.7} (Ni,Co,Fe,Cr) ₅ high entropy alloys with coherent B2/L21 nanoprecipitation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 737, 286-296	5.3	30
183	A Novel Low-Activation VCrFeTaW (= 0.1, 0.2, 0.3, 0.4, and 1) High-Entropy Alloys with Excellent Heat-Softening Resistance. <i>Entropy</i> , 2018 , 20,	2.8	29
182	Nano-sized precipitate stability and its controlling factors in a NiAl-strengthened ferritic alloy. <i>Scientific Reports</i> , 2015 , 5, 16081	4.9	28
181	Ni-Ti SMA-reinforced Al composites. <i>Jom</i> , 2000 , 52, 52-56	2.1	28
180	Novel NiAl-strengthened high entropy alloys with balanced tensile strength and ductility. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 742, 636-647	5.3	28
179	Pressure-induced phase transition in the AlCoCrFeNi high-entropy alloy. <i>Scripta Materialia</i> , 2019 , 161, 88-92	5.6	28
178	Portevin-Le Chatelier mechanism in face-centered-cubic metallic alloys from low to high entropy. <i>International Journal of Plasticity</i> , 2019 , 122, 212-224	7.6	27
177	Origin of serrated flow in bulk metallic glasses. <i>Journal of the Mechanics and Physics of Solids</i> , 2019 , 124, 634-642	5	26
176	Effects of Cu and Zn on microstructures and mechanical behavior of the medium-entropy aluminum alloy. <i>Journal of Alloys and Compounds</i> , 2020 , 820, 153092	5.7	25
175	High-throughput design of high-performance lightweight high-entropy alloys. <i>Nature Communications</i> , 2021 , 12, 4329	17.4	25
174	Quasi-static and dynamic deformation behaviors of in situ Zr-based bulk-metallic-glass-matrix composites. <i>Journal of Materials Research</i> , 2010 , 25, 2264-2270	2.5	24

173	Thermal-imaging technologies for detecting damage during high-cycle fatigue. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004 , 35, 15-23	2.3	24
172	Enhancement of fatigue resistance by overload-induced deformation twinning in a CoCrFeMnNi high-entropy alloy. <i>Acta Materialia</i> , 2020 , 201, 412-424	8.4	24
171	Tensile deformation behavior and mechanical properties of a bulk cast Al _{0.9} CoFeNi ₂ eutectic high-entropy alloy. <i>Journal of Materials Science and Technology</i> , 2021 , 61, 119-124	9.1	24
170	Fatigue behavior of an Fe ₄₈ Cr ₁₅ Mo ₁₄ Er ₂ C ₁₅ B ₆ amorphous steel. <i>Journal of Materials Research</i> , 2007 , 22, 544-550	2.5	23
169	Infrared imaging during low-cycle fatigue of HR-120 alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2002 , 33, 1287-1292	2.3	23
168	A combined drop/suction-casting machine for the manufacture of bulk-metallic-glass materials. <i>Review of Scientific Instruments</i> , 2006 , 77, 033902	1.7	22
167	Stress-life fatigue behavior and fracture-surface morphology of a Cu-based bulk-metallic glass. <i>Journal of Materials Research</i> , 2007 , 22, 374-381	2.5	22
166	Insights from the Lattice-Strain Evolution on Deformation Mechanisms in Metallic-Glass-Matrix Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 2431-2442	2.3	21
165	Size effects on the fatigue behavior of bulk metallic glasses. <i>Journal of Applied Physics</i> , 2011 , 110, 113507.5	2.5	21
164	Temperature evolution and life prediction in fatigue of superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004 , 35, 839-848	2.3	21
163	Incredible improvement in fatigue resistance of friction stir welded 7075-T651 aluminum alloy via surface mechanical rolling treatment. <i>International Journal of Fatigue</i> , 2019 , 124, 15-25	5	21
162	Self-Similar Random Process and Chaotic Behavior In Serrated Flow of High Entropy Alloys. <i>Scientific Reports</i> , 2016 , 6, 29798	4.9	20
161	Corrosion Behavior of Fe ₄₁ Co ₇ Cr ₁₅ Mo ₁₄ C ₁₅ B ₆ Y ₂ Bulk Metallic Glass in Sulfuric Acid Solutions. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 1524-1533	2.3	20
160	Interface Constraints on Shear Band Patterns in Bonded Metallic Glass Films Under Microindentation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 2729-2741	2.3	19
159	Strength softening and stress relaxation of nanostructured materials. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005 , 36, 2641-2649	2.3	19
158	Complexity analysis of serrated flows in a bulk metallic glass under constrained and unconstrained conditions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 771, 138585	5.3	19
157	Peierls barrier characteristic and anomalous strain hardening provoked by dynamic-strain-aging strengthening in a body-centered-cubic high-entropy alloy. <i>Materials Research Letters</i> , 2019 , 7, 475-481	7.4	18
156	Serration Dynamics in a Zr-Based Bulk Metallic Glass. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 2404-2414	2.3	18

155	Strain-rate dependence of hardening and softening in compression of a bulk-metallic glass. <i>Journal of Materials Research</i> , 2007 , 22, 2655-2658	2.5	18
154	Loading-rate-independent delay of catastrophic avalanches in a bulk metallic glass. <i>Scientific Reports</i> , 2016 , 6, 21967	4.9	18
153	Graded microstructures of Al-Li-Mg-Zn-Cu entropic alloys under supergravity. <i>Science China Materials</i> , 2019 , 62, 736-744	7.1	18
152	Dislocation avalanche mechanism in slowly compressed high entropy alloy nanopillars. <i>Communications Physics</i> , 2018 , 1,	5.4	18
151	Tensile deformation mechanisms of an in-situ Ti-based metallic glass matrix composite at cryogenic temperature. <i>Scientific Reports</i> , 2016 , 6, 32287	4.9	17
150	High-temperature materials for structural applications: New perspectives on high-entropy alloys, bulk metallic glasses, and nanomaterials. <i>MRS Bulletin</i> , 2019 , 44, 847-853	3.2	17
149	Plastic dynamics of the Al _{0.5} CoCrCuFeNi high entropy alloy at cryogenic temperatures: Jerky flow, stair-like fluctuation, scaling behavior, and non-chaotic state. <i>Applied Physics Letters</i> , 2017 , 111, 251905	3.4	17
148	Atomic migration and bonding characteristics during a glass transition investigated using as-cast Zr-Cu-Al. <i>Physical Review B</i> , 2011 , 83,	3.3	17
147	Fiber-Matrix Interfaces in Ceramic Composites. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 458, 147		17
146	A multi-phase CrMnFeCoNiAl _{0.75} high-entropy alloy with high strength at intermediate temperature. <i>Intermetallics</i> , 2020 , 120, 106744	3.5	16
145	Microstructure and enhanced mechanical behavior of the Al ₇ Co ₂₄ Cr ₂₁ Fe ₂₄ Ni ₂₄ high-entropy alloy system by tuning the Cr content. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 733, 299-306	5.3	16
144	Neutron diffraction measurements of residual stresses around a crack tip developed under variable-amplitude fatigue loadings. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2010 , 33, 822-831	3	16
143	High-temperature tensile-hold crack-growth behavior of HASTELLOY X alloy compared to HAYNES 188 and HAYNES 230 alloys. <i>Mechanics of Time-Dependent Materials</i> , 2008 , 12, 31-44	1.2	16
142	Crystal structures and textures in the hot-forged Ni-Mn-Ga shape memory alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006 , 37, 1397-1403	2.3	16
141	Plastic flow in dynamic compression of a Zr-based bulk metallic glass. <i>Journal of Materials Research</i> , 2006 , 21, 1570-1575	2.5	16
140	Ultrastrong and ductile BCC high-entropy alloys with low-density via dislocation regulation and nanoprecipitates. <i>Journal of Materials Science and Technology</i> , 2021 , 110, 109-109	9.1	16
139	Entropy modeling on serrated flows in carburized steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 753, 135-145	5.3	15
138	High-Throughput Calculations for High-Entropy Alloys: A Brief Review. <i>Frontiers in Materials</i> , 2020 , 7,	4	15

137	A Low-Cost Lightweight Entropic Alloy with High Strength. <i>Journal of Materials Engineering and Performance</i> , 2018 , 27, 6648-6656	1.6	15
136	Mechanical and Magnetic Properties of the High-Entropy Alloys for Combinatorial Approaches. <i>Crystals</i> , 2020 , 10, 200	2.3	14
135	Diffusion Barrier Performance of AlCrTaTiZr/AlCrTaTiZr-N High-Entropy Alloy Films for Cu/Si Connect System. <i>Entropy</i> , 2020 , 22,	2.8	14
134	Microstructures, mechanical behavior and strengthening mechanism of TiSiCN nanocomposite films. <i>Scientific Reports</i> , 2017 , 7, 2140	4.9	14
133	Plastic Deformation in an Amorphous Ni-P Coating. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 1610-1620	2.3	14
132	Tension-Tension-Fatigue Behaviors of a Zr-Based Bulk-Metallic-Glass-Matrix Composite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 2530-2534 ²⁻³	2.3	14
131	Complexity modeling and analysis of chaos and other fluctuating phenomena. <i>Chaos, Solitons and Fractals</i> , 2018 , 116, 166-175	9.3	14
130	Heterogeneous nucleation in a glass-forming alloy. <i>Applied Physics Letters</i> , 2008 , 92, 244106	3.4	13
129	Effect of Structural Relaxation on Mechanical Behavior of a Zr-Based Bulk-Metallic Glass. <i>Materials Transactions</i> , 2007 , 48, 1781-1784	1.3	13
128	Simultaneously enhancing the ultimate strength and ductility of high-entropy alloys via short-range ordering. <i>Nature Communications</i> , 2021 , 12, 4953	17.4	13
127	Primary and secondary precipitates in a hierarchical-precipitate-strengthened ferritic alloy. <i>Journal of Alloys and Compounds</i> , 2017 , 706, 584-588	5.7	12
126	Preternatural Hexagonal High-Entropy Alloys: A Review. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020 , 33, 1033-1045	2.5	12
125	Influence of thermo-mechanical embrittlement processing on microstructure and mechanical behavior of a pressure vessel steel. <i>Materials and Design</i> , 2016 , 89, 759-769	8.1	12
124	Hold-time effects on elevated-temperature low-cycle-fatigue and crack-propagation behaviors of HAYNES [®] 188 superalloy. <i>Journal of Materials Science</i> , 2009 , 44, 2945-2956	4.3	12
123	Experimental evidence of stress-field-induced selection of variants in Ni-Mn-Ga ferromagnetic shape-memory alloys. <i>Physical Review B</i> , 2007 , 75,	3.3	12
122	Chemical-Affinity Disparity and Exclusivity Drive Atomic Segregation, Short-Range Ordering, and Cluster Formation in High-Entropy Alloys. <i>Acta Materialia</i> , 2021 , 206, 116638	8.4	12
121	Effects of Y, GdCu, and Al Addition on the Thermoelectric Behavior of CoCrFeNi High Entropy Alloys. <i>Metals</i> , 2018 , 8, 781	2.3	12
120	Equation of State of an AlCoCrCuFeNi High-Entropy Alloy. <i>Jom</i> , 2015 , 67, 2310-2313	2.1	11

119	Wear behavior of Er-bearing Cu-based amorphous/crystal BMG composite under oil lubrication. <i>Intermetallics</i> , 2011 , 19, 1216-1221	3.5	11
118	Effects of frequency on fatigue behavior of type 316 low-carbon, nitrogen-added stainless steel in air and mercury for the spallation neutron source. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006 , 37, 163-173	2.3	11
117	Effects of partial crystallization on compression and fatigue behavior of Zr-based bulk metallic glasses. <i>Journal of Materials Research</i> , 2007 , 22, 493-500	2.5	11
116	Shear-Band Deformation in Amorphous Alloys and Composites. <i>Materials Transactions</i> , 2006 , 47, 817-821	1.3	11
115	Interplay between microstructure and deformation behavior of a laser-welded CoCrFeNi high entropy alloy. <i>Materials Research Express</i> , 2019 , 6, 046514	1.7	11
114	Mechanical behaviors and precipitation transformation of the lightweight high-Zn-content Al ₇₀ Zn ₂₀ Mg ₁₀ Ti alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 802, 140637	5.3	11
113	Fatigue induced deformation and thermodynamics evolution in a nano particle strengthened nickel base superalloy. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2016 , 39, 675-685	3	10
112	Effect of Heavy Ion Irradiation Dosage on the Hardness of SA508-IV Reactor Pressure Vessel Steel. <i>Metals</i> , 2017 , 7, 25	2.3	10
111	Air Oxidation of an Fe ₄₈ Cr ₁₅ C ₁₅ Mo ₁₄ B ₆ Er ₂ Bulk Metallic Glass at 600–725°C. <i>Materials Transactions</i> , 2007 , 48, 1864-1869	1.3	10
110	Tensile behavior and deformation mechanisms of bulk ultrafine-grained copper. <i>Journal of Materials Science</i> , 2006 , 41, 6328-6332	4.3	10
109	The low-cycle fatigue and fatigue-crack-growth behavior of HAYNES HR-120 alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2003 , 34, 1451-1460	2.3	10
108	Microstructures and Properties of High-Entropy Materials: Modeling, Simulation, and Experiments. <i>Advanced Engineering Materials</i> , 2021 , 23, 2001044	3.5	10
107	Deformation behavior of a Co-Cr-Fe-Ni-Mo medium-entropy alloy at extremely low temperatures. <i>Materials Today</i> , 2021 , 50, 55-55	21.8	10
106	An Evaluation of the Use of X-ray Residual Stress Determination as a Means of Characterizing Oxidation Damage of Nickel-Based, Cr ₂ O ₃ -Forming Superalloys Subjected to Various Oxidizing Conditions. <i>Oxidation of Metals</i> , 2010 , 74, 305-318	1.6	9
105	Microstructural Control of Ti-Al-Nb-W-B Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007 , 38, 2290-2297	2.3	9
104	Mechanical behavior of a Zr-based bulk metallic glass and its composite at cryogenic temperatures. <i>Journal of Materials Research</i> , 2007 , 22, 445-452	2.5	9
103	Fiber-Reinforced CMCs: Processing, mechanical behavior, modeling. <i>Jom</i> , 1995 , 47, 38-44	2.1	9
102	Structure prediction in high-entropy alloys with machine learning. <i>Applied Physics Letters</i> , 2021 , 118, 231904	3.4	9

101	The predicted rate-dependent deformation behaviour and multistage strain hardening in a model heterostructured body-centered cubic high entropy alloy. <i>International Journal of Plasticity</i> , 2021 , 145, 103073	7.6	9
100	A novel ZrNbMoTaW refractory high-entropy alloy with in-situ forming heterogeneous structure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 827, 142061	5.3	9
99	Applications of High-Pressure Technology for High-Entropy Alloys: A Review. <i>Metals</i> , 2019 , 9, 867	2.3	8
98	Resolving ensembled microstructural information of bulk-metallic-glass-matrix composites using synchrotron x-ray diffraction. <i>Applied Physics Letters</i> , 2010 , 97, 171910	3.4	8
97	Evolution of residual-strain distribution through an overload-induced retardation period during fatigue-crack growth. <i>Journal of Applied Physics</i> , 2010 , 107, 023517	2.5	8
96	Nanoprecipitate-Strengthened High-Entropy Alloys. <i>Advanced Science</i> , 2021 , 8, e2100870	13.6	8
95	Revealing the relationship between microstructures, textures, and mechanical behaviors of cold-rolled Al _{0.1} CoCrFeNi high-entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 804, 140752	5.3	8
94	Effects of Cooling Rates on Glass Formation and Magnetic Behavior for the Fe _{73.0} Cr _{7.0} Si _{3.3} B _{5.0} P _{8.7} Mo _{3.0} Bulk Metallic Glass. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 2004-2009	2.3	7
93	The effect of hydrogen charging on Ln-based amorphous materials. <i>Applied Physics Letters</i> , 2009 , 95, 241901	3.4	7
92	Simultaneously enhanced strength-ductility of AlCoCrFeNi _{2.1} eutectic high-entropy alloy via additive manufacturing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 830, 142327	5.3	7
91	Superior High-Temperature Strength in a Supersaturated Refractory High-Entropy Alloy. <i>Advanced Materials</i> , 2021 , 33, e2102401	24	7
90	Preparation of Bulk TiZrNbMoV and NbTiAlTaV High-Entropy Alloys by Powder Sintering. <i>Metals</i> , 2021 , 11, 1748	2.3	7
89	Vanishing of room-temperature slip avalanches in a face-centered-cubic high-entropy alloy by ultrafine grain formation. <i>Scripta Materialia</i> , 2018 , 155, 99-103	5.6	7
88	Strength can be controlled by edge dislocations in refractory high-entropy alloys. <i>Nature Communications</i> , 2021 , 12, 5474	17.4	7
87	Investigation of phase-transformation path in TiZrHf(VNbTa) _x refractory high-entropy alloys and its effect on mechanical property. <i>Journal of Alloys and Compounds</i> , 2021 , 886, 161187	5.7	7
86	Plasticity performance of Al _{0.5} CoCrCuFeNi high-entropy alloys under nanoindentation. <i>Journal of Iron and Steel Research International</i> , 2017 , 24, 390-396	1.2	6
85	Effect of Ti substitution for Al on the cuboidal nanoprecipitates in Al _{0.7} NiCoFeCr ₂ high-entropy alloys. <i>Journal of Materials Research</i> , 2018 , 33, 3266-3275	2.5	6
84	Damage mechanisms in a cast ductile iron and a Al ₂ O ₃ p /Al composite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998 , 29, 2855-2862	2.3	6

83	In situ thermographic observations on the compression behavior of a relaxed Zr-based bulk-metallic glass. <i>Journal of Materials Research</i> , 2007 , 22, 368-373	2.5	6
82	Novel tungsten oxide microneedles with nanosized tips. <i>Applied Physics Letters</i> , 2006 , 88, 223107	3.4	6
81	Low-cycle fatigue behavior of ULTIMET [®] alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004 , 35, 785-796	2.3	6
80	Damage mechanisms and fiber orientation effects on the load-bearing capabilities of a NEXTEL/BLACKGLAS low-cost ceramic composite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000 , 31, 911-920	2.3	6
79	Predicting temperature-dependent ultimate strengths of body-centered-cubic (BCC) high-entropy alloys. <i>Npj Computational Materials</i> , 2021 , 7,	10.9	6
78	Non-monotonic changes in critical solidification rates for stability of liquid-solid interfaces with static magnetic fields. <i>Scientific Reports</i> , 2016 , 6, 20598	4.9	6
77	Tensile Mechanical Behaviors of In Situ Metallic Glass Matrix Composites at Ambient Temperature and in Supercooled Liquid Region. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 2382-2388	2.3	5
76	Equal Channel Angular Processing of Magnesium Alloys 2013 , 643-652		5
75	Structural Transitions and Magnetic Properties of Ni ₅₀ Mn _{36.7} In _{13.3} Particles with Amorphous-Like Phase. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 3062-3070	2.3	5
74	Fatigue-induced phase formation and its deformation behavior in a cobalt-based superalloy. <i>Powder Diffraction</i> , 2005 , 20, 121-124	1.8	5
73	Fiber Coatings and the Fracture Behavior of a Continuous Fiber Ceramic Composite. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 365, 403		5
72	Electrohydraulic fatigue apparatus for testing at cryogenic temperature. <i>Review of Scientific Instruments</i> , 1979 , 50, 1590	1.7	5
71	Effects of Surface Severe Plastic Deformation on the Mechanical Behavior of 304 Stainless Steel. <i>Metals</i> , 2020 , 10, 831	2.3	5
70	Research on Bulk-metallic Glasses and High-entropy Alloys in Peter K. Liaw's Group and with His Colleagues. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021 , 52, 2033-2093	2.3	5
69	Silicon-content-dependent microstructures and mechanical behavior of (AlCrTiZrMo)-Six-N high-entropy alloy nitride films. <i>Materials and Design</i> , 2021 , 203, 109553	8.1	5
68	Microstructural evolution and mechanical properties of FeCoCrNiCu high entropy alloys: a microstructure-based constitutive model and a molecular dynamics simulation study. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2021 , 42, 1109-1122	3.2	5
67	Recent Progress with BCC-Structured High-Entropy Alloys. <i>Metals</i> , 2022 , 12, 501	2.3	5
66	Microstructures and Properties of the Low-Density Al ₁₅ Zr ₄₀ Ti ₂₈ Nb ₁₂ M(Cr, Mo, Si) ₅ High-Entropy Alloys. <i>Metals</i> , 2022 , 12, 496	2.3	5

65	Investigation of chaos and memory effects in the Bonhoeffer-van der Pol oscillator with a non-ideal capacitor. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2019 , 73, 195-216	3.7	4
64	Relation Between the Defect Interactions and the Serration Dynamics in a Zr-Based Bulk Metallic Glass. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 3892	2.6	4
63	The Effect of Er Addition on the Air-Oxidation of a Zr55Cu30Al10Ni5-Based Bulk Metallic Glass. <i>Oxidation of Metals</i> , 2014 , 81, 453-465	1.6	4
62	Mechanical behaviours of workhardening and worksoftening bulk metallic glasses. <i>Materials Science and Technology</i> , 2012 , 28, 249-255	1.5	4
61	The Effects of Fatigue on the Atomic Structure with Cyclic Loading in Zr50Cu40Al10 and Zr60Cu30Al10 Glasses. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 2676-2679	2.3	4
60	High-Energy Synchrotron X-Ray Diffraction for In Situ Study of Phase Transformation in Shape-Memory Alloys. <i>Jom</i> , 2012 , 64, 150-160	2.1	4
59	The effects of tensile plastic deformation on the hardness and Young's modulus of a bulk nanocrystalline alloy studied by nanoindentation. <i>Journal of Materials Research</i> , 2007 , 22, 1235-1239	2.5	4
58	Developing high-strength ferritic alloys reinforced by combination of hierarchical and laves precipitates. <i>Journal of Alloys and Compounds</i> , 2021 , 856, 158162	5.7	4
57	Effects of Silicon Content on the Microstructures and Mechanical Properties of (AlCrTiZrV)-Si-N High-Entropy Alloy Films. <i>Entropy</i> , 2019 , 21,	2.8	4
56	Unraveling the discontinuous plastic flow of a Co-Cr-Fe-Ni-Mo multiprincipal-element alloy at deep cryogenic temperatures. <i>Physical Review Materials</i> , 2021 , 5,	3.2	4
55	Assessment of Equal Channel Angular Extrusion Processing of Magnesium Alloys	243-247	4
54	ANSYS-Based Simulation and Optimization on Temperature Field of Amorphous Ingot Made by Water Quenching. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 2371-2375	2.3	3
53	Embrittlement in a bulk nanocrystalline alloy induced by room-temperature aging. <i>Applied Physics Letters</i> , 2006 , 89, 061919	3.4	3
52	Machine-learning and high-throughput studies for high-entropy materials. <i>Materials Science and Engineering Reports</i> , 2022 , 147, 100645	30.9	3
51	Dynamic tensile mechanisms and constitutive relationship in CrFeNi medium entropy alloys at room and cryogenic temperatures. <i>Physical Review Materials</i> , 2021 , 5,	3.2	3
50	From symmetry to entropy: Crystal entropy difference strongly affects early stage phase transformation. <i>Applied Physics Letters</i> , 2019 , 115, 264103	3.4	3
49	Effect of concentration on the structure of isothermally-annealed CuZr metallic glasses. <i>Materials Science and Technology</i> , 2018 , 34, 2287-2293	1.5	3
48	Cyclic deformation and fatigue behavior of 7075-T651 Al alloy with a gradient structure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 822, 141669	5.3	3

47	Temperature-dependent mechanical behavior of an Al _{0.5} Cr _{0.9} FeNi _{2.5} V _{0.2} high-entropy alloy. <i>Applied Physics Letters</i> , 2021 , 119, 121902	3.4	3
46	Effects of Transient Thermal Shock on the Microstructures and Corrosion Properties of a Reduced Activation High-Entropy Alloy. <i>Journal of Alloys and Compounds</i> , 2022 , 165762	5.7	3
45	Slip avalanche in nanoscratching of metallic glasses. <i>Journal of Applied Physics</i> , 2017 , 122, 115108	2.5	2
44	Optimize the Mechanical Properties of Al _{0.6} CoCrFeNi High-Entropy Alloys by Thermo-Mechanical Processing. <i>Metals</i> , 2022 , 12, 178	2.3	2
43	Machine Learning and Data Analytics for Design and Manufacturing of High-Entropy Materials Exhibiting Mechanical or Fatigue Properties of Interest 2021 , 115-238		2
42	Hardening behaviour in the irradiated high entropy alloy. <i>Mechanics of Materials</i> , 2021 , 155, 103744	3.3	2
41	Deformation mechanisms in hexagonal close-packed high-entropy alloys. <i>Journal of Applied Physics</i> , 2021 , 129, 175104	2.5	2
40	Competitive relationship during fatigue-crack initiation of friction-stir-welded Al alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 809, 141006	5.3	2
39	Additive Manufacturing of High-Entropy Alloys: Microstructural Metastability and Mechanical Behavior. <i>Journal of Phase Equilibria and Diffusion</i> , 2021 , 42, 748	1	2
38	Charge transfer effect on local lattice distortion in a HfNbTiZr high entropy alloy. <i>Scripta Materialia</i> , 2021 , 203, 114104	5.6	2
37	Enhancing strength and ductility via crystalline-amorphous nanoarchitectures in TiZr-based alloys.. <i>Science Advances</i> , 2022 , 8, eabm2884	14.3	2
36	Magnetic Behavior of Pr ₅₅ Cu _{13.3} Ni _{6.7} Al ₂₅ Metallic Glasses. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 2395-2398	2.3	1
35	Crystallization in Fe- and Co-Based Amorphous Alloys Studied by In-Situ X-Ray Diffraction. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 5859-5862	2.3	1
34	A Simple Model for Examining Composition Effects in Eutectic Nucleation. <i>Materials Transactions</i> , 2007 , 48, 1675-1679	1.3	1
33	Comparisons of experimental measurements and a theoretical model for specimen self-heating during fatigue of type 316 LN stainless steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004 , 35, 3334-3339	2.3	1
32	Effects of Glass-Forming Metallic Film on the Fatigue Behavior of C-2000 Ni-Based Alloy. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 903, 1		1
31	High-performance composites: Commonalty of phenomena. <i>Jom</i> , 1996 , 48, 43-44	2.1	1
30	Effect of annealing on mechanical and thermoelectric properties of a Al ₂ CoCrFeNi high-entropy alloy. <i>Materials and Design</i> , 2022 , 213, 110313	8.1	1

29	Effects of grain boundary on irradiation-induced zero-dimensional defects in an irradiated copper. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2022 , 43, 233-246	3.2	1
28	Enhanced strength-ductility synergy via novel bifunctional nano-precipitates in a high-entropy alloy. <i>International Journal of Plasticity</i> , 2022 , 153, 103235	7.6	1
27	Mechanical Behavior of High-Entropy Alloys: A Review 2021 , 435-522		1
26	Serrated Flow in Alloy Systems 2021 , 523-644		1
25	Development of Precipitation-Strengthened AlNbTiVM (M = Co, Ni) Light-Weight Refractory High-Entropy Alloys. <i>Materials</i> , 2021 , 14,	3.5	1
24	On temperature and strain-rate dependence of flow serration in HfNbTaTiZr high-entropy alloy. <i>Scripta Materialia</i> , 2021 , 200, 113919	5.6	1
23	Microstructural Evolution in Chroming Coatings Friction Pairs under Dry Sliding Test Conditions. <i>Advances in Tribology</i> , 2018 , 2018, 1-6	1.6	1
22	TiZrHfNbTaSn high-entropy alloys with good properties as potential biomaterials. <i>Rare Metals</i> , 1	5.5	1
21	Novel Ti-Zr-Hf-Nb-Fe refractory high-entropy alloys for potential biomedical applications. <i>Journal of Alloys and Compounds</i> , 2022 , 906, 164383	5.7	1
20	A Strategic Design Route to Find a Depleted Uranium High-Entropy Alloy with Great Strength. <i>Metals</i> , 2022 , 12, 699	2.3	1
19	Exploring the amorphous phase formation and properties of W-Ta-(Cr, Fe, Ni) high-entropy alloy gradient films via a high-throughput technique. <i>Journal of Alloys and Compounds</i> , 2022 , 913, 165294	5.7	1
18	Niobium addition improves the corrosion resistance of TiHfZrNbx high-entropy alloys in Hank's solution. <i>Electrochimica Acta</i> , 2022 , 424, 140651	6.7	1
17	Mechanical Behavior and Thermal Stability of (AlCrTiZrMo)N/ZrO ₂ Nano-Multilayered High-Entropy Alloy Film Prepared by Magnetron Sputtering. <i>Crystals</i> , 2022 , 12, 232	2.3	0
16	Effects of Zr addition on lattice strains and electronic structures of NbTaTiV high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 831, 142293	5.3	0
15	Ultrasonic-vibration-enhanced plasticity of an entropic alloy at room temperature. <i>Acta Materialia</i> , 2022 , 225, 117569	8.4	0
14	Measurement of Lattice Distortion in NbTaTiV and NbTaTiVZr Using Electron Microscopy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021 , 52, 2094-2099 ^{2,3}		0
13	Microstructures, Mechanical Behavior, and Radiation Damage of (TiVCr) _x -(TaW) _{1-x} Binary System High-Entropy Alloy Films. <i>Metals</i> , 2022 , 12, 772	2.3	0
12	Dynamic Stress-Strain Behavior in ZrTiCuNiAl Noncrystalline Alloys Pretreated Under High Pressures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 2390-2394	2.3	

- 11 The Behavior of Hastelloy C-2000 Alloy Under Strain-Controlled Fatigue Loading **2013**, 240-254
- 10 Foreword: Special Topic on Neutron and X-Ray Diffraction Studies of Advanced Materials IV
Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, **2012**, 43, 1410-1412^{2,3}
- 9 Magnetic-field-driven reversal phase transition in highly textured and self-accommodated martensites of NiTiHf composite. *Journal of Strain Analysis for Engineering Design*, **2011**, 46, 607-613^{1,3}
- 8 Improved Fatigue Properties of 316L Stainless Steel Using Glass-Forming Coatings. *Materials Research Society Symposia Proceedings*, **2004**, 843, 3241
- 7 Informatics for Combinatorial Experiments: Accelerating Data Interpretation*. *Materials Research Society Symposia Proceedings*, **2005**, 894, 1
- 6 Damage mechanisms and fiber orientation effects on the load-bearing capabilities of a NEXTEL/BLACKGLAS low-cost ceramic composite. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2000**, 31, 911-920 2.3
- 5 Modeling the micromechanical aspects of composites. *Jom*, **1996**, 48, 43-43 2.1
- 4 Intermetallic alloys and their composites: The promise and challenges remain. *Jom*, **1993**, 45, 36-36 2.1
- 3 Wear Properties of Sc-Bearing Zr-Based Composite BMG with Nano-CuZr₂ under Lubrication. *Applied Sciences (Switzerland)*, **2020**, 10, 4909 2.6
- 2 Plasticity Enhancement by Fe-Addition on NiAl Alloy: A Synchrotron X-ray Diffraction Mapping and Molecular Dynamics Simulation Study. *Quantum Beam Science*, **2018**, 2, 18 1.6
- 1 Unveiling microstructural origins of the balanced strength-ductility combination in eutectic high-entropy alloys at cryogenic temperatures. *Materials Research Letters*, **2022**, 10, 602-610 7.4