List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	High temperature shape memory alloys. International Materials Reviews, 2010, 55, 257-315.	19.3	762
2	Magnetic Fieldâ€Induced Phase Transformation in NiMnCoIn Magnetic Shapeâ€Memory Alloys—A New Actuation Mechanism with Large Work Output. Advanced Functional Materials, 2009, 19, 983-998.	14.9	384
3	Deformation of single crystal Hadfield steel by twinning and slip. Acta Materialia, 2000, 48, 1345-1359.	7.9	364
4	Magnetic field and stress induced martensite reorientation in NiMnGa ferromagnetic shape memory alloy single crystals. Acta Materialia, 2006, 54, 233-245.	7.9	293
5	Modeling the deformation behavior of Hadfield steel single and polycrystals due to twinning and slip. Acta Materialia, 2000, 48, 2031-2047.	7.9	254
6	Compressive response of NiTi single crystals. Acta Materialia, 2000, 48, 3311-3326.	7.9	249
7	Competing mechanisms and modeling of deformation in austenitic stainless steel single crystals with and without nitrogen. Acta Materialia, 2001, 49, 3919-3933.	7.9	196
8	Thermomechanical cyclic response of an ultrafine-grained NiTi shape memory alloy. Acta Materialia, 2008, 56, 3630-3646.	7.9	187
9	Mechanical twinning and texture evolution in severely deformed Ti–6Al–4V at high temperatures. Acta Materialia, 2006, 54, 3755-3771.	7.9	169
10	TEM study of structural and microstructural characteristics of a precipitate phase in Ni-rich Ni–Ti–Hf and Ni–Ti–Zr shape memory alloys. Acta Materialia, 2013, 61, 6191-6206.	7.9	169
11	Energy harvesting using martensite variant reorientation mechanism in a NiMnGa magnetic shape memory alloy. Applied Physics Letters, 2007, 90, 172505.	3.3	155
12	A method to enhance cyclic reversibility of NiTiHf high temperature shape memory alloys. Scripta Materialia, 2006, 54, 2203-2208.	5.2	153
13	An ultra-high strength martensitic steel fabricated using selective laser melting additive manufacturing: Densification, microstructure, and mechanical properties. Acta Materialia, 2020, 186, 199-214.	7.9	151
14	Assessing printability maps in additive manufacturing of metal alloys. Acta Materialia, 2019, 176, 199-210.	7.9	146
15	Shape memory and pseudoelastic behavior of 51.5%Ni–Ti single crystals in solutionized and overaged state. Acta Materialia, 2001, 49, 3609-3620.	7.9	140
16	Effect of grain size on prismatic slip in Mg–3Al–1Zn alloy. Scripta Materialia, 2012, 67, 439-442.	5.2	136
17	On the stress-assisted magnetic-field-induced phase transformation in Ni2MnGa ferromagnetic shape memory alloys. Acta Materialia, 2007, 55, 4253-4269.	7.9	134
18	Giant elastocaloric effect in directionally solidified Ni–Mn–In magnetic shape memory alloy. Scripta Materialia. 2015. 105. 42-45.	5.2	133

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19	On the mechanical behavior of single crystal NiTi shape memory alloys and related polycrystalline phenomenon. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 317, 85-92.	5.6	118
20	Mechanical and wear properties of ultrafine-grained pure Ti produced by multi-pass equal-channel angular extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 517, 97-104.	5.6	115
21	Microstructural characterization and shape memory characteristics of the Ni50.3Ti34.7Hf15 shape memory alloy. Acta Materialia, 2015, 83, 48-60.	7.9	115
22	Spatial Control of Functional Response in 4D-Printed Active Metallic Structures. Scientific Reports, 2017, 7, 46707.	3.3	109
23	Transformation behaviour and unusual twinning in a NiTi shape memory alloy ausformed using equal channel angular extrusion. Philosophical Magazine, 2005, 85, 1729-1745.	1.6	107
24	The effect of precipitates on the superelastic response of [1 0 0] oriented FeMnAlNi single crystals under compression. Acta Materialia, 2015, 97, 234-244.	7.9	104
25	Microstructure evolution and mechanical behavior of bulk copper obtained by consolidation of micro- and nanopowders using equal-channel angular extrusion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 2935-2949.	2.2	103
26	An inverse optimization strategy to determine single crystal mechanical behavior from polycrystal tests: Application to AZ31 Mg alloy. International Journal of Plasticity, 2014, 57, 1-15.	8.8	103
27	Cyclic deformation behavior of single crystal NiTi. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 314, 67-74.	5.6	102
28	Effect of precipitation on mechanical and wear properties of ultrafine-grained Cu–Cr–Zr alloy. Wear, 2014, 311, 149-158.	3.1	99
29	The effect of heat treatments on Ni43Mn42Co4Sn11 meta-magnetic shape memory alloys for magnetic refrigeration. Acta Materialia, 2014, 74, 66-84.	7.9	97
30	Detwinning in NiTi alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 5-13.	2.2	95
31	Extrinsic stacking faults and twinning in hadfield manganese steel single crystals. Scripta Materialia, 2001, 44, 337-343.	5.2	94
32	Grain refinement vs. crystallographic texture: Mechanical anisotropy in a magnesium alloy. Scripta Materialia, 2011, 64, 193-196.	5.2	94
33	Microstructure, crystallographic texture, and plastic anisotropy evolution in an Mg alloy during equal channel angular extrusion processing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7616-7627.	5.6	94
34	Cyclic stress–strain response of ultrafine grained copper. International Journal of Fatigue, 2006, 28, 243-250.	5.7	92
35	A comparative study of the cytotoxicity and corrosion resistance of nickel–titanium and titanium–niobium shape memory alloys. Acta Biomaterialia, 2012, 8, 2863-2870.	8.3	92
36	On the effect of gamma phase formation on the pseudoelastic performance of polycrystalline Fe–Mn–Al–Ni shape memory alloys. Scripta Materialia, 2015, 108, 23-26.	5.2	92

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37	Tailored thermal expansion alloys. Acta Materialia, 2016, 102, 333-341.	7.9	92
38	The effect of nanoprecipitates on the superelastic properties of FeNiCoAlTa shape memory alloy single crystals. Acta Materialia, 2013, 61, 3445-3455.	7.9	91
39	Long-Term Oxidation of Ti ₂ AlC in Air and Water Vapor at 1000–1300°C Temperature Range. Journal of the Electrochemical Society, 2011, 159, C90-C96.	2.9	90
40	Superelastic response of a single crystalline FeMnAlNi shape memory alloy under tension and compression. Acta Materialia, 2015, 89, 374-383.	7.9	89
41	Relationship between crystallographic compatibility and thermal hysteresis in Ni-rich NiTiHf and NiTiZr high temperature shape memory alloys. Acta Materialia, 2016, 121, 374-383.	7.9	89
42	Recoverable stress-induced martensitic transformation in a ferromagnetic CoNiAl alloy. Scripta Materialia, 2003, 49, 831-836.	5.2	88
43	Role of starting texture and deformation modes on low-temperature shear formability and shear localization of Mg–3Al–1Zn alloy. Acta Materialia, 2015, 89, 408-422.	7.9	88
44	Consolidation of amorphous copper based powder by equal channel angular extrusion. Journal of Non-Crystalline Solids, 2003, 317, 144-151.	3.1	84
45	Characterization and modeling of the magnetic field-induced strain and work output in magnetic shape memory alloys. Journal of Magnetism and Magnetic Materials, 2007, 312, 164-175.	2.3	83
46	Shape memory behavior and tension–compression asymmetry of a FeNiCoAlTa single-crystalline shape memory alloy. Acta Materialia, 2012, 60, 2186-2195.	7.9	83
47	Multi-objective Bayesian materials discovery: Application on the discovery of precipitation strengthened NiTi shape memory alloys through micromechanical modeling. Materials and Design, 2018, 160, 810-827.	7.0	83
48	Finite interface dissipation phase field modeling of Ni–Nb under additive manufacturing conditions. Acta Materialia, 2020, 185, 320-339.	7.9	83
49	The effect of training on two-way shape memory effect of binary NiTi and NiTi based ternary high temperature shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 560, 653-666.	5.6	82
50	Mechanical flow anisotropy in severely deformed pure titanium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 434, 294-302.	5.6	81
51	The effect of twinning and slip on the bauschinger effect of hadfield steel single crystals. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 695-706.	2.2	79
52	DFT studies on structure, mechanics and phase behavior of magnetic shape memory alloys: Ni ₂ MnGa. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1026-1035.	1.8	79
53	Laser Powder Bed Fusion of Defect-Free NiTi Shape Memory Alloy Parts with Superior Tensile Superelasticity. Acta Materialia, 2022, 229, 117781.	7.9	79
54	The effect of severe marforming on shape memory characteristics of a Ti-rich NiTi alloy processed using equal channel angular extrusion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 2527-2539.	2.2	78

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55	On the mechanical response and microstructure evolution of NiCoCr single crystalline medium entropy alloys. Materials Research Letters, 2018, 6, 442-449.	8.7	78
56	Controlling martensitic transformation characteristics in defect-free NiTi shape memory alloys fabricated using laser powder bed fusion and a process optimization framework. Acta Materialia, 2021, 215, 117017.	7.9	78
57	Flow stress anisotropy and Bauschinger effect in ultrafine grained copper. Acta Materialia, 2006, 54, 5477-5488.	7.9	77
58	Pseudoelasticity at elevated temperatures in [001] oriented Co49Ni21Ga30 single crystals under compression. Scripta Materialia, 2006, 55, 663-666.	5.2	77
59	Processing and characterization of porous Ti2AlC with controlled porosity and pore size. Acta Materialia, 2012, 60, 6266-6277.	7.9	77
60	Stress-assisted reversible magnetic field-induced phase transformation in Ni2MnGa magnetic shape memory alloys. Scripta Materialia, 2006, 55, 403-406.	5.2	76
61	Role of severe plastic deformation on the cyclic reversibility of a Ti50.3Ni33.7Pd16 high temperature shape memory alloy. Acta Materialia, 2010, 58, 6411-6420.	7.9	75
62	Size effects in the superelastic response of Ni54Fe19Ga27 shape memory alloy pillars with a two stage martensitic transformation. Acta Materialia, 2012, 60, 5670-5685.	7.9	75
63	On the printability and transformation behavior of nickel-titanium shape memory alloys fabricated using laser powder-bed fusion additive manufacturing. Journal of Manufacturing Processes, 2018, 35, 672-680.	5.9	75
64	Compressive response of a single crystalline CoNiAl shape memory alloy. Scripta Materialia, 2004, 51, 261-266.	5.2	74
65	Effect of precipitation on the microstructure and the shape memory response of the Ni50.3Ti29.7Zr20 high temperature shape memory alloy. Scripta Materialia, 2013, 69, 354-357.	5.2	74
66	Tensile actuation response of additively manufactured nickel-titanium shape memory alloys. Scripta Materialia, 2018, 146, 164-168.	5.2	74
67	The deformation of low-stacking-fault-energy austenitic steels. Jom, 2002, 54, 31-37.	1.9	73
68	Plastic flow anisotropy of pure zirconium after severe plastic deformation at room temperature. Acta Materialia, 2009, 57, 4855-4865.	7.9	73
69	Effect of commercial purity levels on the mechanical properties of ultrafine-grained titanium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2303-2308.	5.6	73
70	Anomalous work hardening behavior of Fe40Mn40Cr10Co10 high entropy alloy single crystals deformed by twinning and slip. Acta Materialia, 2019, 181, 555-569.	7.9	72
71	Tension–compression asymmetry in severely deformed pure copper. Acta Materialia, 2007, 55, 4603-4613	7.9	71
72	Multi-phase microstructure design of a low-alloy TRIP-assisted steel through a combined computational and experimental methodology. Acta Materialia, 2012, 60, 3022-3033.	7.9	71

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73	Deformation of FeNiCoTi shape memory single crystals. Scripta Materialia, 2001, 44, 779-784.	5.2	70
74	Effect of disperse Ti3N4 particles on the martensitic transformations in titanium nickelide single crystals. Physics of Metals and Metallography, 2008, 106, 577-589.	1.0	70
75	Improvement in the Shape Memory Response of Ti50.5Ni24.5Pd25 High-Temperature Shape Memory Alloy with Scandium Microalloying. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2485-2497.	2.2	70
76	Shape memory characteristics of Ti49.5Ni25Pd25Sc0.5 high-temperature shape memory alloy after severe plastic deformation. Acta Materialia, 2011, 59, 4747-4760.	7.9	70
77	EFFECT OF AGING ON THE MARTENSITIC TRANSFORMATION CHARACTERISTICS OF A Ni -RICH NiTiHf HIGH TEMPERATURE SHAPE MEMORY ALLOY. Functional Materials Letters, 2012, 05, 1250038.	1.2	69
78	Direct measurement of large reversible magnetic-field-induced strain in Ni–Co–Mn–In metamagnetic shape memory alloys. Acta Materialia, 2012, 60, 6883-6891.	7.9	69
79	On the low-cycle fatigue response of CoCrNiFeMn high entropy alloy with ultra-fine grain structure. Acta Materialia, 2021, 205, 116540.	7.9	69
80	Ultra-high temperature multi-component shape memory alloys. Scripta Materialia, 2019, 158, 83-87.	5.2	68
81	Expanding the Repertoire of Shape Memory Alloys. Science, 2010, 327, 1468-1469.	12.6	67
82	On the microstructural origins of martensitic transformation arrest in a NiCoMnIn magnetic shape memory alloy. Acta Materialia, 2018, 142, 95-106.	7.9	67
83	Effects of crystallographic orientation on the superelastic response of FeMnAlNi single crystals. Scripta Materialia, 2016, 116, 147-151.	5.2	66
84	Deformation twinning in difficult-to-work alloys during severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 243-247.	5.6	64
85	Influence of crystallographic compatibility on residual strain of TiNi based shape memory alloys during thermo-mechanical cycling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 574, 9-16.	5.6	63
86	Dynamic precipitation in Mg-3Al-1Zn alloy during different plastic deformation modes. Acta Materialia, 2016, 116, 1-13.	7.9	63
87	Numerical and experimental analysis of heat distribution in the laser powder bed fusion of Ti-6Al-4V. IISE Transactions, 2019, 51, 136-152.	2.4	62
88	Microstructure and martensitic transformation characteristics of CoNiGa high temperature shape memory alloys. Acta Materialia, 2011, 59, 1168-1183.	7.9	61
89	Cyclic degradation in bamboo-like Fe–Mn–Al–Ni shape memory alloys — The role of grain orientation. Scripta Materialia, 2016, 114, 156-160.	5.2	61
90	Orientation dependence of twinning in single crystalline CoCrFeMnNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 705, 176-181.	5.6	61

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91	Effect of vanadium micro-alloying on the microstructural evolution and creep behavior of Al-Er-Sc-Zr-Si alloys. Acta Materialia, 2017, 124, 501-512.	7.9	61
92	Effect of severe ausforming via equal channel angular extrusion on the shape memory response of a NiTi alloy. Journal of Nuclear Materials, 2007, 361, 298-305.	2.7	59
93	Pseudoelasticity and Cyclic Stability in Co49Ni21Ga30 Shape-Memory Alloy Single Crystals at Ambient Temperature. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 2026-2039.	2.2	58
94	High Strength and High Ductility of Ultrafine-Grained, Interstitial-Free Steel Produced by ECAE and Annealing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1884-1894.	2.2	58
95	Corrosion fatigue behavior of a biocompatible ultrafine-grained niobium alloy in simulated body fluid. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 5, 181-192.	3.1	58
96	Effects of cyclic heat treatment and aging on superelasticity in oligocrystalline Fe-Mn-Al-Ni shape memory alloy wires. Scripta Materialia, 2017, 134, 66-70.	5.2	58
97	Hydroxyapatite production on ultrafine-grained pure titanium by micro-arc oxidation and hydrothermal treatment. Surface and Coatings Technology, 2011, 205, S537-S542.	4.8	57
98	Equal-channel angular sheet extrusion of interstitial-free (IF) steel: Microstructural evolution and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6573-6583.	5.6	57
99	Work output of the two-way shape memory effect in Ti50.5Ni24.5Pd25 high-temperature shape memory alloy. Scripta Materialia, 2011, 65, 903-906.	5.2	56
100	Effects of dynamic recrystallization and strain-induced dynamic precipitation on the corrosion behavior of partially recrystallized Mg–9Al–1Zn alloys. Journal of Magnesium and Alloys, 2020, 8, 1016-1037.	11.9	56
101	Microstructure and mechanical properties of severely deformed powder processed Ti–6Al–4V using equal channel angular extrusion. Scripta Materialia, 2003, 49, 1021-1027.	5.2	55
102	On the fatigue behavior of ultrafine-grained interstitial-free steel. International Journal of Materials Research, 2006, 97, 1328-1336.	0.3	55
103	Tension/compression asymmetry of functional properties in [001]-oriented ferromagnetic NiFeGaCo single crystals. Intermetallics, 2010, 18, 2458-2463.	3.9	55
104	A Sensory Material Approach for Reducing Variability in Additively Manufactured Metal Parts. Scientific Reports, 2017, 7, 3604.	3.3	55
105	On the fatigue crack growth–microstructure relationship in ultrafine-grained interstitial-free steel. Journal of Materials Science, 2010, 45, 4813-4821.	3.7	54
106	Microstructural characterization and superelastic response of a Ni50.3Ti29.7Zr20 high-temperature shape memory alloy. Scripta Materialia, 2014, 81, 12-15.	5.2	54
107	Comparative analysis of the effects of severe plastic deformation and thermomechanical training on the functional stability of Ti50.5Ni24.5Pd25 high-temperature shape memory alloy. Scripta Materialia, 2011, 64, 315-318.	5.2	53
108	Cyclic degradation mechanisms in aged FeNiCoAlTa shape memory single crystals. Acta Materialia, 2014, 79, 126-137.	7.9	53

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109	Effect of grain size on the superelastic response of a FeMnAlNi polycrystalline shape memory alloy. Scripta Materialia, 2016, 125, 68-72.	5.2	53
110	Strain–temperature behavior of NiTiCu shape memory single crystals. Acta Materialia, 2001, 49, 3621-3634.	7.9	52
111	Microstructure–mechanical property relationships in ultrafine-grained NbZr. Acta Materialia, 2007, 55, 6596-6605.	7.9	52
112	Thermoelastic martensitic transformations in single crystals with disperse particles. Russian Physics Journal, 2012, 54, 937-950.	0.4	52
113	On the effect of titanium on quenching sensitivity and pseudoelastic response in Fe-Mn-Al-Ni-base shape memory alloy. Scripta Materialia, 2017, 126, 20-23.	5.2	51
114	The effects of wide range of compositional changes on the martensitic transformation characteristics of NiTiHf shape memory alloys. Scripta Materialia, 2019, 161, 78-83.	5.2	51
115	On The Deformation Mechanisms in Single Crystal Hadfield Manganese Steels. Scripta Materialia, 1998, 38, 1009-1015.	5.2	49
116	On the Microstructural Stability of Ultrafine-Grained Interstitial-Free Steel under Cyclic Loading. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 1946-1955.	2.2	49
117	High-temperature superelasticity in CoNiGa, CoNiAl, NiFeGa, and TiNi monocrystals. Russian Physics Journal, 2008, 51, 1016-1036.	0.4	49
118	Effect of niobium addition on the martensitic transformation and magnetocaloric effect in low hysteresis NiCoMnSn magnetic shape memory alloys. Applied Physics Letters, 2014, 105, .	3.3	49
119	Interplay between the effects of deformation mechanisms and dynamic recrystallization on the failure of Mg-3Al-1Zn. Acta Materialia, 2019, 168, 448-472.	7.9	49
120	Enhanced mechanical properties and corrosion resistance of a fine-grained Mg-9Al-1Zn alloy: the role of bimodal grain structure and β-Mg17Al12 precipitates. Materialia, 2020, 13, 100840.	2.7	49
121	Work production using the two-way shape memory effect in NiTi and a Ni-rich NiTiHf high-temperature shape memory alloy. Smart Materials and Structures, 2015, 24, 125023.	3.5	48
122	Effects of upper cycle temperature on the actuation fatigue response of NiTiHf high temperature shape memory alloys. Acta Materialia, 2017, 138, 185-197.	7.9	48
123	Microstructural refinement and deformation twinning during severe plastic deformation of 316L stainless steel at high temperatures. Journal of Materials Research, 2004, 19, 2268-2278.	2.6	47
124	Shape memory and pseudoelasticity response of NiMnCoIn magnetic shape memory alloy single crystals. Scripta Materialia, 2008, 58, 815-818.	5.2	47
125	Monitoring the fatigue-induced damage evolution in ultrafine-grained interstitial-free steel utilizing digital image correlation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 517, 225-234.	5.6	47
126	Reduction in tension–compression asymmetry via grain refinement and texture design in Mg–3Al–1Zn sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 610, 220-227.	5.6	47

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127	Two way shape memory effect in NiTiHf high temperature shape memory alloy tubes. Acta Materialia, 2019, 163, 1-13.	7.9	47
128	The role of heat treatment on the cyclic stress–strain response of ultrafine-grained interstitial-free steel. International Journal of Fatigue, 2008, 30, 426-436.	5.7	46
129	Direct measure of giant magnetocaloric entropy contributions in Ni–Mn–In. Acta Materialia, 2016, 105, 176-181.	7.9	46
130	Reversible Martensitic Transformation under Low Magnetic Fields in Magnetic Shape Memory Alloys. Scientific Reports, 2017, 7, 40434.	3.3	46
131	Effect of severe plastic deformation on tensile properties and impact toughness of two-phase Zn–40Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 490, 403-410.	5.6	45
132	Multiple ferroic glasses via ordering. Acta Materialia, 2015, 101, 107-115.	7.9	45
133	Determining recoverable and irrecoverable contributions to accumulated strain in a NiTiPd high-temperature shape memory alloy during thermomechanical cycling. Scripta Materialia, 2011, 65, 123-126.	5.2	44
134	Magnetic field-induced martensitic phase transformation in magnetic shape memory alloys: Modeling and experiments. Journal of the Mechanics and Physics of Solids, 2014, 69, 33-66.	4.8	44
135	Role of microstructure on the actuation fatigue performance of Ni-Rich NiTiHf high temperature shape memory alloys. Acta Materialia, 2019, 175, 107-120.	7.9	44
136	The role of coherent precipitates in martensitic transformations in single crystal and polycrystalline Ti-50.8at%Ni. Scripta Materialia, 1998, 39, 699-705.	5.2	43
137	Experimental investigation of simultaneous creep, plasticity and transformation of Ti50.5Pd30Ni19.5 high temperature shape memory alloy during cyclic actuation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 117-127.	5.6	43
138	Nanoparticle consolidation using equal channel angular extrusion at room temperature. Journal of Materials Science, 2007, 42, 1561-1576.	3.7	42
139	Hierarchical evolution and thermal stability of microstructure with deformation twins in 316 stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 694, 121-131.	5.6	42
140	Fracture toughness of NiTi–Towards establishing standard test methods for phase transforming materials. Acta Materialia, 2019, 162, 226-238.	7.9	42
141	High-temperature in-situ microscopy during stress-induced phase transformations in Co49Ni21Ga30 shape memory alloy single crystals. International Journal of Materials Research, 2010, 101, 1-11.	0.3	41
142	Role of applied stress level on the actuation fatigue behavior of NiTiHf high temperature shape memory alloys. Acta Materialia, 2018, 153, 156-168.	7.9	41
143	Uncertainty Propagation Analysis of Computational Models in Laser Powder Bed Fusion Additive Manufacturing Using Polynomial Chaos Expansions. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2018, 140, .	2.2	41
144	Significant disparity of non-basal dislocation activities in hot-rolled highly-textured Mg and Mg-3Al-1Zn alloy under tension. Acta Materialia, 2021, 207, 116691.	7.9	41

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145	Effect of aging on the superelastic response of a single crystalline FeNiCoAlTa shape memory alloy. Scripta Materialia, 2012, 67, 475-478.	5.2	40
146	Effect of grain constraint on the field requirements for magnetocaloric effect in Ni45Co5Mn40Sn10 melt-spun ribbons. Journal of Applied Physics, 2016, 120, .	2.5	40
147	Compressive performance and crack propagation in Al alloy/Ti2AlC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 672, 247-256.	5.6	40
148	Towards designing anisotropy for ductility enhancement: A theory-driven investigation in Mg-alloys. Acta Materialia, 2017, 131, 349-362.	7.9	40
149	Cyclic stress–strain response and low-cycle fatigue damage in ultrafine grained copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 457-461.	5.6	39
150	Role of nano-precipitation on the microstructure and shape memory characteristics of a new Ni50.3Ti34.7Zr15 shape memory alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 655, 193-203.	5.6	39
151	Superelastic response of the FeNiCoAlTi single crystals under tension and compression. Scripta Materialia, 2015, 101, 1-4.	5.2	38
152	Stability of a Ni-rich Ni-Ti-Zr high temperature shape memory alloy upon low temperature aging and thermal cycling. Scripta Materialia, 2016, 124, 47-50.	5.2	37
153	Deformation of NiTiCu shape memory single crystals in compression. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 477-489.	2.2	36
154	The effect of temperature and extrusion speed on the consolidation of zirconium-based metallic glass powder using equal-channel angular extrusion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 247-256.	2.2	36
155	Shape memory effect and high-temperature superelasticity in high-strength single crystals. Journal of Alloys and Compounds, 2013, 577, S393-S398.	5.5	36
156	Microstructural design considerations in Fe-Mn-Al-Ni shape memory alloy wires: Effects of natural aging. Scripta Materialia, 2018, 142, 153-157.	5.2	36
157	Multivariate Calibration and Experimental Validation of a 3D Finite Element Thermal Model for Laser Powder Bed Fusion Metal Additive Manufacturing. Integrating Materials and Manufacturing Innovation, 2018, 7, 116-135.	2.6	36
158	Effects of cold and warm rolling on the shape memory response of Ni50Ti30Hf20 high-temperature shape memory alloy. Acta Materialia, 2018, 157, 228-244.	7.9	36
159	Modelling the temperature and texture effects on the deformation mechanisms of magnesium alloy AZ31. International Journal of Mechanical Sciences, 2020, 182, 105727.	6.7	36
160	Fabrication and characterization of NiTi/Ti3SiC2 and NiTi/Ti2AlC composites. Journal of Alloys and Compounds, 2014, 610, 635-644.	5.5	35
161	A data-driven machine learning approach to predicting stacking faulting energy in austenitic steels. Journal of Materials Science, 2017, 52, 11048-11076.	3.7	35
162	The role of nitrogen on the deformation response of hadfield steel single crystals. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 1821-1831.	2.2	33

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163	On the deformation response and cyclic stability of Ni50Ti35Hf15 high temperature shape memory alloy wires. Scripta Materialia, 2017, 135, 92-96.	5.2	33
164	Orientation dependence of superelasticity in FeMnAlNi single crystals under compression. Scripta Materialia, 2019, 166, 48-52.	5.2	33
165	Effects of training on the thermomechanical behavior of NiTiHf and NiTiZr high temperature shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 794, 139857.	5.6	33
166	Superelastic cycling and room temperature recovery of Ti74Nb26 shape memory alloy. Acta Materialia, 2010, 58, 2216-2224.	7.9	32
167	Phase and morphology evolution in high-temperature Ti3SiC2–NiTi diffusion-bonded joints. Scripta Materialia, 2011, 65, 237-240.	5.2	32
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