## İbrahİm Karaman

List of Publications by Year in descending order

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382 papers 16,114 citations

69 h-index 102 g-index

390 all docs

390 docs citations

times ranked

390

7210 citing authors

#	Article	IF	CITATIONS
1	Bayesian Calibration of Multiple Coupled Simulation Models for Metal Additive Manufacturing: A Bayesian Network Approach. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2022, 8, .	1.1	5
2	Actuation fatigue performance of NiTiZr and comparison to NiTiHf high temperature shape memory alloys. Materials Science & Described and Processing, 2022, 829, 142154.	5.6	10
3	A differential evaporation model to predict chemistry change of additively manufactured metals. Materials and Design, 2022, 213, 110328.	7.0	4
4	Thermal- and stress-induced martensitic transformations in [0 0 1]-oriented Ni44Fe19Ga27Co10 single crystals. Materials Letters, 2022, 310, 131477.	2.6	5
5	Data-driven shape memory alloy discovery using Artificial Intelligence Materials Selection (AIMS) framework. Acta Materialia, 2022, 228, 117751.	7.9	23
6	Compositional and microstructural sensitivity of the actuation fatigue response in NiTiHf high temperature shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 838, 142786.	5.6	14
7	Effects of microstructure and composition on constitutive response of high temperature shape memory alloys: Micromechanical modeling using 3-D reconstructions with experimental validation. Acta Materialia, 2022, 232, 117929.	7.9	7
8	Engineering thermal hysteresis of ferromagnetic shape memory alloy sensory particles. Scripta Materialia, 2022, 213, 114619.	5.2	1
9	Laser Powder Bed Fusion of Defect-Free NiTi Shape Memory Alloy Parts with Superior Tensile Superelasticity. Acta Materialia, 2022, 229, 117781.	7.9	79
10	Corrosion behavior of Mg-Zn-Zr-RE alloys under physiological environment – Impact on mechanical integrity and biocompatibility. Journal of Magnesium and Alloys, 2022, 10, 1542-1572.	11.9	20
11	Hybrid microstructure-defect printability map in laser powder bed fusion additive manufacturing. Computational Materials Science, 2022, 209, 111401.	3.0	5
12	The shape memory effect and superelasticity in [001]-oriented NiFeGaCo single crystals in dependence on cobalt concentration. AIP Conference Proceedings, 2022, , .	0.4	1
13	Review: additive manufacturing of pure tungsten and tungsten-based alloys. Journal of Materials Science, 2022, 57, 9769-9806.	3.7	8
14	Extending the Fatigue Life of NiTiHf High Temperature Shape Memory Alloys through Partial Thermal Cycling. , 2022, , .		1
15	Role of thermally-stable deformation twins on the high-temperature mechanical response of an austenitic stainless steel. Materials Science & Spineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 845, 143199.	5.6	5
16	Aerospace, Energy Recovery, and Medical Applications: Shape Memory Alloy Case Studies for CASMART 3rd Student Design Challenge. Shape Memory and Superelasticity, 2022, 8, 150-167.	2.2	2
17	Structure and substructure characterization of solution-treated Ni50.3Ti29.7Hf20 high-temperature shape memory alloy. Scripta Materialia, 2022, 219, 114888.	5.2	4
18	Actuation-Induced stable crack growth in near-equiatomic nickel-titanium shape memory alloys: Experimental and numerical analysis. International Journal of Solids and Structures, 2021, 221, 165-179.	2.7	7

#	Article	IF	CITATIONS
19	On the low-cycle fatigue response of CoCrNiFeMn high entropy alloy with ultra-fine grain structure. Acta Materialia, 2021, 205, 116540.	7.9	69
20	Fabrication and characterization of aluminum - magnetic shape memory alloy composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 805, 140549.	5.6	2
21	Experimental observations of "reversible―transformation toughening. Scripta Materialia, 2021, 191, 81-85.	5.2	6
22	Half metallicity in Cr substituted Fe2TiSn. Scientific Reports, 2021, 11, 524.	3.3	10
23	The effect of stress-induced martensite aging in tension and compression on B2–B19′ martensitic transformation in Ni <sub>50.3</sub> Ti <sub>32.2</sub> Hf <sub>17.5</sub> high-temperature shape memory alloy. Smart Materials and Structures, 2021, 30, 025039.	3.5	7
24	Nucleation site potency distributions in thermoelastic martensitic transformation in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ni</mml:mi><mml:rparticles. .<="" 2021,="" 5,="" materials,="" physical="" review="" td=""><td>mn &gt;24-33 &lt; /m</td><td>ml:mn&gt;</td></mml:rparticles.></mml:msub></mml:mrow></mml:math>	mn >24-33 < /m	ml:mn>
25	Laser-based additive manufacturing of a binary Ni-5 wt.%Nb alloy. Journal of Manufacturing Processes, 2021, 62, 720-728.	5.9	7
26	Special Issue Focus Mechanics and Physics of Active Materials and Systems. Shape Memory and Superelasticity, 2021, 7, 5-6.	2.2	O
27	Effect of Specimen Thickness on the Fracture Toughness of a NiTi Shape Memory Alloy. Shape Memory and Superelasticity, 2021, 7, 90-100.	2.2	6
28	Competing Interactions between Mesoscale Length-Scales, Order-Disorder, and Martensitic Transformation in Ferromagnetic Shape Memory Alloys. Acta Materialia, 2021, 206, 116616.	7.9	16
29	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
30	Tube equal channel angular extrusion (tECAE) of Mg–3Al–1Zn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 814, 141236.	5.6	8
31	In-situ investigation of anisotropic crystalline and bulk negative thermal expansion in titanium alloys. Acta Materialia, 2021, 210, 116847.	7.9	5
32	Shape Memory Alloy-Enabled Expandable Space Habitatâ€"Case Studies for Second CASMART Student Design Challenge. Shape Memory and Superelasticity, 2021, 7, 280-303.	2.2	5
33	Modelling dynamic recrystallisation in magnesium alloy AZ31. International Journal of Plasticity, 2021, 142, 102995.	8.8	29
34	The Effects of Annealing After Equal Channel Angular Extrusion (ECAE) on Mechanical and Magnetic Properties of 49Fe-49Co-2V Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 4090-4099.	2.2	3
35	A printability assessment framework for fabricating low variability nickel-niobium parts using laser powder bed fusion additive manufacturing. Rapid Prototyping Journal, 2021, 27, 1737-1748.	3.2	6
36	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

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37	A unified description of mechanical and actuation fatigue crack growth in shape memory alloys. Acta Materialia, 2021, 217, 117155.	7.9	14
38	Martensitic Transformation in <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mi>Fe</mml:mi></mml:mrow><mm 115704.<="" 127,="" 2021,="" letters,="" physical="" review="" td=""><td>l:m<b>v:s</b>w&gt;<r< td=""><td>mm<b>ıl</b>zmi&gt;x</td></r<></td></mm></mml:mrow></mml:mrow></mml:mrow></mml:math>	l:m <b>v:s</b> w> <r< td=""><td>mm<b>ıl</b>zmi&gt;x</td></r<>	mm <b>ıl</b> zmi>x
39	Simultaneous deformation twinning and martensitic transformation in CoCrFeMnNi high entropy alloy at high temperatures. Scripta Materialia, 2021, 202, 113995.	5.2	26
40	An efficient framework for printability assessment in Laser Powder Bed Fusion metal additive manufacturing. Additive Manufacturing, 2021, 46, 102018.	3.0	9
41	Strain glass state in Ni-rich Ni-Ti-Zr shape memory alloys. Acta Materialia, 2021, 218, 117232.	7.9	21
42	NiTiHf shape memory alloys as phase change thermal storage materials. Acta Materialia, 2021, 218, 117175.	7.9	18
43	Effect of composition and phase diagram features on printability and microstructure in laser powder bed fusion: Development and comparison of processing maps across alloy systems. Additive Manufacturing, 2021, 47, 102258.	3.0	3
44	A rigorous test and improvement of the Eagar-Tsai model for melt pool characteristics in laser powder bed fusion additive manufacturing. Additive Manufacturing, 2021, 47, 102300.	3.0	2
45	Effect of heat treatments on the microstructure and mechanical properties of an ultra-high strength martensitic steel fabricated via laser powder bed fusion additive manufacturing. Additive Manufacturing, 2021, 47, 102255.	3.0	7
46	Part I.: Friction stir welding of equiatomic nickel titanium shape memory alloy – microstructure, mechanical and corrosion behavior. Journal of Advanced Joining Processes, 2021, 4, 100071.	2.7	6
47	Fracture resistance of shape memory alloys under thermomechanical loading. Engineering Fracture Mechanics, 2021, 258, 108059.	4.3	3
48	The Effect of Subsequent Stress-Induced Martensite Aging on the Viscoelastic Properties of Aged NiTiHf Polycrystals. Metals, 2021, 11, 1890.	2.3	0
49	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
50	Design of alumina-forming austenitic stainless steel using genetic algorithms. Materials and Design, 2020, 186, 108198.	7.0	15
51	Finite interface dissipation phase field modeling of Ni–Nb under additive manufacturing conditions. Acta Materialia, 2020, 185, 320-339.	7.9	83
52	Effects of composition on the mechanical properties and negative thermal expansion in martensitic TiNb alloys. Scripta Materialia, 2020, 178, 351-355.	5.2	22
53	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
54	Enhanced mechanical properties and corrosion resistance of a fine-grained Mg-9Al-1Zn alloy: the role of bimodal grain structure and $\hat{l}^2$ -Mg17Al12 precipitates. Materialia, 2020, 13, 100840.	2.7	49

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55	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
56	Modeling of the ECAP Induced Strain Hardening Behavior in FCC Metals. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5453-5474.	2.2	9
57	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
58	The effects of severe plastic deformation on the mechanical and corrosion characteristics of a bioresorbable Mg-ZKQX6000 alloy. Materials Science and Engineering C, 2020, 115, 111130.	7.3	23
59	Evolution of anisotropic and negative thermal expansion in rolled equiatomic nickel-titanium martensite. Scripta Materialia, 2020, 186, 142-146.	5.2	10
60	Emergent properties in the natural composite Ni <sub>2</sub> MnSb <sub>0.5</sub> Al <sub>0.5</sub> . Journal Physics D: Applied Physics, 2020, 53, 225302.	2.8	1
61	Two-way shape memory effect in stress-induced martensite aged Ni50.3Ti32.2Hf17.5 alloy. Materials Letters, 2020, 268, 127589.	2.6	7
62	Activation and suppression of ã€^cÂ+Âa〉 dislocations in a textured Mg–3Al–1Zn alloy. Scripta Materialia, 2020, 179, 49-54.	5.2	22
63	Statistical modelling of microsegregation in laser powder-bed fusion. Philosophical Magazine Letters, 2020, 100, 271-282.	1.2	4
64	Exploring performance limits of a new martensitic high strength steel by ausforming via equal channel angular pressing. Scripta Materialia, 2020, 184, 63-69.	5.2	19
65	Effect of twinning on the orientation dependence of mechanical behaviour and fracture in single crystals of the equiatomic CoCrFeMnNi high-entropy alloy at 77K. Materials Science & Diple Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 784, 139315.	5.6	28
66	Evolution of mechanical behavior of magnesium alloy infiltrated 3D-printed CoCr scaffolds under corrosion in simulated body fluid. Materials Science and Engineering C, 2019, 105, 109747.	7.3	8
67	Special Features of Functional Properties of Heterophase High-Strength Ni50.2Ti37.3Hf12.5 Polycrystals and Single Crystals. Russian Physics Journal, 2019, 62, 534-540.	0.4	3
68	Functionally Graded Materials through robotics-inspired path planning. Materials and Design, 2019, 182, 107975.	7.0	28
69	Assessing printability maps in additive manufacturing of metal alloys. Acta Materialia, 2019, 176, 199-210.	7.9	146
70	Large Dimension and Low-Cost Fe-SMA Rods. MATEC Web of Conferences, 2019, 271, 01005.	0.2	1
71	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
72	Embedded magnetic shape memory sensory particles in lightweight composites for crack detection. Materials Science & Description A: Structural Materials: Properties, Microstructure and Processing, 2019, 751, 201-213.	5.6	19

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73	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
74	Integrated Health Monitoring of Transportation Structures with Magnetic Fe-SMA Wires. MATEC Web of Conferences, 2019, 271, 01008.	0.2	2
<b>7</b> 5	Orientation dependence of superelasticity in FeMnAlNi single crystals under compression. Scripta Materialia, 2019, 166, 48-52.	5.2	33
76	Stable crack growth in NiTi shape memory alloys: 3D finite element modeling and experimental validation. Smart Materials and Structures, 2019, 28, 064001.	3.5	16
77	Inverse Optimization to Design Processing Paths to Tailor Formability of Mg Alloys. Minerals, Metals and Materials Series, 2019, , 239-246.	0.4	0
78	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
79	Effect of Temperature on the Fracture Toughness of a NiTiHf High Temperature Shape Memory Alloy. Shape Memory and Superelasticity, 2019, 5, 362-373.	2.2	11
80	Ultra-high temperature multi-component shape memory alloys. Scripta Materialia, 2019, 158, 83-87.	5.2	68
81	Strength and ductility of powder consolidated ultrafine-grain tantalum. International Journal of Refractory Metals and Hard Materials, 2019, 80, 73-84.	3.8	8
82	Martensitic transformation and magnetocaloric properties of NiCoMnSn magnetic shape memory alloys. Intermetallics, 2019, 106, 65-70.	3.9	18
83	On the fast kinetics of B2–L21 ordering in Ni-Co-Mn-In metamagnetic shape memory alloys. Journal of Alloys and Compounds, 2019, 781, 479-489.	5.5	10
84	Thermal, acoustic and magnetic noises emitted during martensitic transformation in single crystalline Ni45Co5Mn36.6In13.4 meta-magnetic shape memory alloy. Journal of Alloys and Compounds, 2019, 778, 669-680.	5.5	5
85	Effects of composition and crystallographic ordering on the ferromagnetic transition in Ni Co Mn In magnetic shape memoryÂalloys. Acta Materialia, 2019, 166, 630-637.	7.9	8
86	Effects of Testing Parameters on the Fatigue Performance NiTiHf High Temperature Shape Memory Alloys. , 2019, , .		3
87	Characterization and Processing of High Temperature Shape Memory Alloys for Aerospace Applications. , 2019, , .		5
88	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
89	Structure and growth of core–shell nanoprecipitates in Al–Er–Sc–Zr–V–Si high-temperature alloys. Journal of Materials Science, 2019, 54, 1857-1871.	3.7	12
90	Fracture toughness of NiTi–Towards establishing standard test methods for phase transforming materials. Acta Materialia, 2019, 162, 226-238.	7.9	42

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91	Two way shape memory effect in NiTiHf high temperature shape memory alloy tubes. Acta Materialia, 2019, 163, 1-13.	7.9	47
92	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
93	Fracture toughness of martensitic NiTiHf high-temperature shape memory alloy. , 2019, , .		3
94	Martensitic Transformations of Ni–Mn–X Heusler Alloys with XÂ=ÂGa, In and Sn. Minerals, Metals and Materials Series, 2018, , 185-188.	0.4	0
95	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
96	Microstructural refinement in an ultra-high strength martensitic steel via equal channel angular pressing. Materials Science & Description A: Structural Materials: Properties, Microstructure and Processing, 2018, 725, 57-64.	5.6	29
97	Relative cooling power enhancement by tuning magneto-structural stability in Ni-Mn-In Heusler alloys. Journal of Alloys and Compounds, 2018, 744, 785-790.	5.5	17
98	Firstâ€Principles Characterization of Equilibrium Vacancy Concentration in Metamagnetic Shape Memory Alloys: An Example of Ni <sub>2</sub> MnGa. Physica Status Solidi (B): Basic Research, 2018, 255, 1700523.	1.5	6
99	Twinning in [001]-oriented single crystals of CoCrFeMnNi high-entropy alloy at tensile deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 713, 253-259.	5.6	30
100	H-Phase Precipitation and Martensitic Transformation in Ni-rich Ni–Ti–Hf and Ni–Ti-Zr High-Temperature Shape Memory Alloys. Shape Memory and Superelasticity, 2018, 4, 85-92.	2.2	32
101	Design, fabrication, and testing of a multiple-actuation shape memory alloy pipe coupler. Journal of Intelligent Material Systems and Structures, 2018, 29, 1165-1182.	2.5	15
102	On the microstructural origins of martensitic transformation arrest in a NiCoMnIn magnetic shape memory alloy. Acta Materialia, 2018, 142, 95-106.	7.9	67
103	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
104	Tensile actuation response of additively manufactured nickel-titanium shape memory alloys. Scripta Materialia, 2018, 146, 164-168.	5.2	74
105	The effects of cold rolling and the subsequent heat treatments on the shape memory and the superelasticity characteristics of Cu <sub>73</sub> Al <sub>16</sub> Mn <sub><math>11</math></sub> shape memory alloy. Smart Materials and Structures, 2018, 27, 015028.	3.5	11
106	Orientation Dependence of the Elastocaloric Effect in Ni <sub>54</sub> Fe <sub>19</sub> Ga <sub>27</sub> Ferromagnetic Shape Memory Alloy. Physica Status Solidi (B): Basic Research, 2018, 255, 1700437.	1.5	16
107	Crack Growth Behavior in NiTi Shape Memory Alloys Under Mode-I Isothermal Loading: Effect of Stress State. , 2018, , .		4
108	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

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109	Probing Glassiness in Heuslers via Density Functional Theory Calculations. Springer Series in Materials Science, 2018, , 153-182.	0.6	1
110	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
111	Equal channel angular extrusion for bulk processing of Fe–Co–2V soft magnetic alloys, part I: Processing and mechanical properties. Journal of Materials Research, 2018, 33, 2168-2175.	2.6	13
112	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
113	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
114	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
115	Glassy Phonon Heralds a Strain Glass State in a Shape Memory Alloy. Physical Review Letters, 2018, 120, 245701.	7.8	24
116	On the mechanical response and microstructure evolution of NiCoCr single crystalline medium entropy alloys. Materials Research Letters, 2018, 6, 442-449.	8.7	78
117	Equal channel angular extrusion for bulk processing of Fe–Co–2V soft magnetic alloys, part II: Texture analysis and magnetic properties. Journal of Materials Research, 2018, 33, 2176-2188.	2.6	7
118	Full-Field Micromechanics of Precipitated Shape Memory Alloys. , 2018, , 225-255.		0
119	Predictive Modeling of the Constitutive Response of Precipitation Hardened Ni-Rich NiTi. Shape Memory and Superelasticity, 2017, 3, 9-23.	2.2	8
120	Reversible Martensitic Transformation under Low Magnetic Fields in Magnetic Shape Memory Alloys. Scientific Reports, 2017, 7, 40434.	3.3	46
121	Ductility Enhancement in Mg Alloys by Anisotropy Engineering. Minerals, Metals and Materials Series, 2017, , 153-158.	0.4	0
122	Combined Effects of Grain Size Refinement and Dynamic Precipitation on Mechanical Properties of a New Magnesium Alloy. Minerals, Metals and Materials Series, 2017, , 43-51.	0.4	2
123	Towards designing anisotropy for ductility enhancement: A theory-driven investigation in Mg-alloys. Acta Materialia, 2017, 131, 349-362.	7.9	40
124	Bayesian Calibration and Uncertainty Quantification for a Physics-Based Precipitation Model of Nickel–Titanium Shape-Memory Alloys. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2017, 139, .	2.2	28
125	On the deformation response and cyclic stability of Ni50Ti35Hf15 high temperature shape memory alloy wires. Scripta Materialia, 2017, 135, 92-96.	<b>5.</b> 2	33
126	Spatial Control of Functional Response in 4D-Printed Active Metallic Structures. Scientific Reports, 2017, 7, 46707.	3.3	109

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127	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
128	Analysis of Magnetization as a Function of Temperature for CoMn1â^'x Fe x Ge. Journal of Superconductivity and Novel Magnetism, 2017, 30, 3587-3594.	1.8	5
129	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
130	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
131	Orientation dependence of twinning in single crystalline CoCrFeMnNi high-entropy alloy. Materials Science & Science amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 705, 176-181.	<b>5.</b> 6	61
132	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
133	A Sensory Material Approach for Reducing Variability in Additively Manufactured Metal Parts. Scientific Reports, 2017, 7, 3604.	3.3	55
134	The effect of dynamic aging on the cyclic stability of Cu 73 Al 16 Mn 11 shape memory alloy. Materials Science & Science amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 701, 352-358.	5.6	17
135	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.	<b>5.</b> 2	51
136	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
137	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
138	Cytocompatibility evaluation of <scp>N</scp> i <scp>M</scp> n <scp>S</scp> n metaâ€magnetic shape memory alloys for biomedical applications. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 853-863.	3.4	8
139	Impact of cycle-hysteresis interactions on the performance of giant magnetocaloric effect refrigerants. Materials Research Express, 2016, 3, 074001.	1.6	13
140	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
141	Mechanisms of plastic deformation in [ $1\hat{A}^-11$ ]-oriented single crystals of FeNiMnCrCo high entropy alloy. AIP Conference Proceedings, 2016, , .	0.4	8
142	Accessibility investigation of large magnetic entropy change in CoMn1â^'xFexGe. Journal of Applied Physics, 2016, 119, .	2.5	22
143	Slip and Twinning in the [ $1  \hat{A}^-$ \$\$ overline{mathbf{1}} \$\$ 49]-Oriented Single Crystals of a High-Entropy Alloy. Russian Physics Journal, 2016, 59, 1242-1250.	0.4	19
144	Effects of crystallographic orientation on the superelastic response of FeMnAlNi single crystals. Scripta Materialia, 2016, 116, 147-151.	5.2	66

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145	Unusual reversible twinning modes and giant superelastic strains in FeNiCoAlNb single crystals. Scripta Materialia, 2016, 119, 43-46.	5.2	30
146	Effect of grain size on the superelastic response of a FeMnAlNi polycrystalline shape memory alloy. Scripta Materialia, 2016, 125, 68-72.	5.2	53
147	High-Performance Metal/Carbide Composites with Far-From-Equilibrium Compositions and Controlled Microstructures. Scientific Reports, 2016, 6, 35523.	3.3	24
148	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
149	Applications of the directional solidification in magnetic shape memory alloys. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012029.	0.6	3
150	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
151	Dynamic precipitation in Mg-3Al-1Zn alloy during different plastic deformation modes. Acta Materialia, 2016, 116, 1-13.	7.9	63
152	Active Cooling of a Microvascular Shape Memory Alloyâ€Polymer Matrix Composite Hybrid Material. Advanced Engineering Materials, 2016, 18, 1145-1153.	3.5	18
153	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
154	Direct measure of giant magnetocaloric entropy contributions in Ni–Mn–In. Acta Materialia, 2016, 105, 176-181.	7.9	46
155	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
156	Tailored thermal expansion alloys. Acta Materialia, 2016, 102, 333-341.	7.9	92
157	Atomic order and martensitic transformation entropy change in Ni–Co–Mn–In metamagnetic shape memory alloys. Scripta Materialia, 2016, 110, 61-64.	5.2	24
158	Microstructural Design of Mg Alloys for Lightweight Structural Applications. , 2016, , 225-233.		0
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