David C Dunand

List of Publications by Year
in descending order

366 papers	19,539 citations	12303 69 h-index	17055 122 g-index
372 all docs	372 docs citations	372 times ranked	10599 citing authors

#	Article	IF	Citations
1	Porous Metals and Metallic Foams: Current Status and Recent Developments. Advanced Engineering Materials, 2008, 10, 775-787.	1.6	676
2	Precipitation strengthening at ambient and elevated temperatures of heat-treatable Al(Sc) alloys. Acta Materialia, 2002, 50, 4021-4035.	3.8	645
3	Porous NiTi for bone implants: A review. Acta Biomaterialia, 2008, 4, 773-782.	4.1	483
4	Criteria for developing castable, creep-resistant aluminum-based alloys â€“ A review. International Journal of Materials Research, 2006, 97, 246-265.	0.8	431
5	Precipitation evolution in Alâ€“0.1Sc, Alâ€“0.1Zr and Alâ€“0.1Scâ€“0.1Zr (at.%) alloys during isochronal aging. Acta Materialia, 2010, 58, 5184-5195.	3.8	408
6	Mechanical properties of Al(Sc,Zr) alloys at ambient and elevated temperatures. Acta Materialia, 2003, 51, 4803-4814.	3.8	385
7	Giant magnetic-field-induced strains in polycrystalline Niâ€“Mnâ€“Ga foams. Nature Materials, 2009, 8, 863-866.	13.3	332
8	Coarsening resistance at 400 Â°C of precipitation-strengthened Alâ€“Zrâ€“Scâ€“Er alloys. Acta Materialia, 2011, 59, 7029-7042.	3.8	315
9	Microstructure and mechanical properties of Al-Mg-Zr alloys processed by selective laser melting. Acta Materialia, 2018, 153, 35-44.	3.8	315
10	Size Effects on Magnetic Actuation in Niâ€Mnâ€Ga Shapeâ€Memory Alloys. Advanced Materials, 2011, 23, 216-232.	11.1	312
11	Processing of Titanium Foams. Advanced Engineering Materials, 2004, 6, 369-376.	1.6	294
12	Ambient- and high-temperature mechanical properties of isochronally aged Alâ€“0.06Sc, Alâ€“0.06Zr and Alâ€“0.06Scâ€“0.06Zr (at.%) alloys. Acta Materialia, 2011, 59, 943-954.	3.8	269
13	Freeze casting â€“ A review of processing, microstructure and properties via the open data repository, FreezeCasting.net. Progress in Materials Science, 2018, 94, 243-305.	16.0	269
14	Precipitation evolution in Alâ€“Zr and Alâ€“Zrâ€“Ti alloys during aging at 450â€“600Â°C. Acta Materialia, 2008, 56, 1182-1195.	3.8	246
15	Precipitation evolution in Alâ€“Zr and Alâ€“Zrâ€“Ti alloys during isothermal aging at 375â€“425Â°C. Acta Materialia, 2008, 56, 114-127.	3.8	239
16	Directionally freeze-cast titanium foam with aligned, elongated pores. Acta Materialia, 2008, 56, 105-113.	3.8	220
17	SMARTS - a spectrometer for strain measurement in engineering materials. Applied Physics A: Materials Science and Processing, 2002, 74, s1707-s1709.	1.1	219
18	Hybrid bone implants: Self-assembly of peptide amphiphile nanofibers within porous titanium. Biomaterials, 2008, 29, 161-171.	5.7	216

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19	Plasticity and damage in aluminum syntactic foams deformed under dynamic and quasi-static conditions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 391, 408-417.	2.6	208
20	High strength, low stiffness, porous NiTi with superelastic properties. Acta Biomaterialia, 2005, 1, 705-716.	4.1	206
21	Improving aging and creep resistance in a dilute Alâ€“Sc alloy by microalloying with Si, Zr and Er. Acta Materialia, 2014, 63, 73-85.	3.8	203
22	A bioactive titanium foam scaffold for bone repair. Acta Biomaterialia, 2005, 1, 523-533.	4.1	175
23	Phase transformation and thermal expansion of Cu/ZrW₂O₈ metal matrix composites. Journal of Materials Research, 1999, 14, 780-789.	1.2	172
24	Metallic Architectures from 3Dâ€Printed Powderâ€Based Liquid Inks. Advanced Functional Materials, 2015, 25, 6985-6995.	7.8	164
25	Structural evolution of nanoporous gold during thermal coarsening. Acta Materialia, 2012, 60, 4972-4981.	3.8	163
26	Role of silicon in accelerating the nucleation of Al3(Sc,Zr) precipitates in dilute Alâ€“Scâ€“Zr alloys. Acta Materialia, 2012, 60, 4740-4752.	3.8	161
27	Shape-memory NiTi foams produced by replication of NaCl space-holders. Acta Biomaterialia, 2008, 4, 1996-2007.	4.1	159
28	Nucleation and Precipitation Strengthening in Dilute Al-Ti and Al-Zr Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 2552-2563.	1.1	156
29	Effect of laser rescanning on the grain microstructure of a selective laser melted Al-Mg-Zr alloy. Materials Characterization, 2018, 143, 34-42.	1.9	156
30	Effect of Mg addition on the creep and yield behavior of an Alâ€“Sc alloy. Acta Materialia, 2003, 51, 4751-4760.	3.8	155
31	Printed Origami Structures. Advanced Materials, 2010, 22, 2251-2254.	11.1	144
32	Effect of Er additions on ambient and high-temperature strength of precipitation-strengthened Alâ€“Zrâ€“Scâ€“Si alloys. Acta Materialia, 2012, 60, 3643-3654.	3.8	138
33	Load partitioning in aluminum syntactic foams containing ceramic microspheres. Acta Materialia, 2006, 54, 1501-1511.	3.8	133
34	Creep properties and microstructure of a precipitation-strengthened ferritic Feâ€“Alâ€“Niâ€“Cr alloy. Acta Materialia, 2014, 71, 89-99.	3.8	133
35	Effects of substituting rare-earth elements for scandium in a precipitation-strengthened Alâ€“0.08at. %Sc alloy. Scripta Materialia, 2006, 55, 437-440.	2.6	129
36	Mechanical properties of a density-graded replicated aluminum foam. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 489, 439-443.	2.6	128

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37	Ductile Bulk Metallic Glass Foams. Advanced Materials, 2005, 17, 484-486.	11.1	123
38	Load partitioning between ferrite and cementite during elasto-plastic deformation of an ultrahigh-carbon steel. Acta Materialia, 2007, 55, 1999-2011.	3.8	123
39	Effects of Ti additions on the nanostructure and creep properties of precipitation-strengthened Alâ€“Sc alloys. Acta Materialia, 2005, 53, 4225-4235.	3.8	122
40	Shape-memory NiTi foams produced by solid-state replication with NaF. Intermetallics, 2007, 15, 1612-1622.	1.8	116
41	Microstructure and mechanical properties of a precipitation-strengthened Al-Zr-Sc-Er-Si alloy with a very small Sc content. Acta Materialia, 2018, 144, 80-91.	3.8	115
42	Model for creep threshold stress in precipitation-strengthened alloys with coherent particles. Scripta Materialia, 2002, 47, 503-508.	2.6	114
43	Erbium and ytterbium solubilities and diffusivities in aluminum as determined by nanoscale characterization of precipitates. Acta Materialia, 2009, 57, 4081-4089.	3.8	114
44	Mechanical properties of directionally freeze-cast titanium foams. Acta Materialia, 2011, 59, 146-158.	3.8	114
45	Microstructure and mechanical properties of a 5754 aluminum alloy modified by Sc and Zr additions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 338, 8-16.	2.6	113
46	Evolution of nanoscale precipitates in Al microalloyed with Sc and Er. Acta Materialia, 2009, 57, 4022-4031.	3.8	111
47	Numerical modeling of pore size and distribution in foamed titanium. Mechanics of Materials, 2006, 38, 933-944.	1.7	107
48	Strain and texture evolution during mechanical loading of a crack tip in martensitic shape-memory NiTi. Acta Materialia, 2007, 55, 3929-3942.	3.8	105
49	Effects of Yb and Zr microalloying additions on the microstructure and mechanical properties of dilute Alâ€“Sc alloys. Acta Materialia, 2011, 59, 7615-7626.	3.8	105
50	Criteria for developing castable, creep-resistant aluminum-based alloys â€“ A review. International Journal of Materials Research, 2022, 97, 246-265.	0.1	105
51	Processing and structure of open-celled amorphous metal foams. Scripta Materialia, 2005, 52, 335-339.	2.6	104
52	3D ink-extrusion additive manufacturing of CoCrFeNi high-entropy alloy micro-lattices. Nature Communications, 2019, 10, 904.	5.8	104
53	Multicomponent Î³â€™-strengthened Co-based superalloys with increased solvus temperatures and reduced mass densities. Acta Materialia, 2018, 147, 284-295.	3.8	100
54	Synthesis, structure, and mechanical properties of Niâ€“Al and Niâ€“Crâ€“Al superalloy foams. Acta Materialia, 2004, 52, 1283-1295.	3.8	96

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55	Titanium foams produced by solid-state replication of NaCl powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 691-697.	2.6	93
56	Synchrotron X-ray study of bulk lattice strains in externally loaded Cu-Mo composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 2949-2962.	1.1	90
57	Increasing Magnetoplasticity in Polycrystalline Ni-Mn-Ga by Reducing Internal Constraints through Porosity. Physical Review Letters, 2007, 99, 247201.	2.9	88
58	Phase fraction, texture and strain evolution in superelastic NiTi and NiTiâ€“TiC composites investigated by neutron diffraction. Acta Materialia, 1999, 47, 3353-3366.	3.8	87
59	Syntactic bulk metallic glass foam. Applied Physics Letters, 2004, 84, 1108-1110.	1.5	86
60	Towards an integrated materials characterization toolbox. Journal of Materials Research, 2011, 26, 1341-1383.	1.2	84
61	Morphological and topological analysis of coarsened nanoporous gold by x-ray nanotomography. Applied Physics Letters, 2010, 96, 043122.	1.5	82
62	Modeling the creep threshold stress due to climb of a dislocation in the stress field of a misfitting precipitate. Acta Materialia, 2011, 59, 5125-5134.	3.8	81
63	Strengthening mechanisms in aluminum containing coherent Al3Sc precipitates and incoherent Al2O3 dispersoids. Acta Materialia, 2007, 55, 1299-1308.	3.8	80
64	Ferritic Alloys with Extreme Creep Resistance via Coherent Hierarchical Precipitates. Scientific Reports, 2015, 5, 16327.	1.6	80
65	Effects of Pore Morphology and Bone Ingrowth on Mechanical Properties of Microporous Titanium as an Orthopaedic Implant Material. Materials Transactions, 2004, 45, 1124-1131.	0.4	79
66	Plasticity and damage in cellular amorphous metals. Acta Materialia, 2005, 53, 4427-4440.	3.8	77
67	Effect of reinforcement connectivity on the elasto-plastic behavior of aluminum composites containing sub-micron alumina particles. Acta Materialia, 2003, 51, 6105-6121.	3.8	75
68	Creep properties of coarse-grained Al(Sc) alloys at 300Â°C. Scripta Materialia, 1999, 40, 691-696.	2.6	74
69	Synthesis of nickelâ€“aluminide foams by pack-aluminization of nickel foams. Intermetallics, 2001, 9, 581-589.	1.8	74
70	Titanium with controllable pore fractions by thermoreversible gelcasting of TiH2. Acta Materialia, 2008, 56, 5147-5157.	3.8	72
71	Mechanical properties and optimization of the aging of a dilute Al-Sc-Er-Zr-Si alloy with a high Zr/Sc ratio. Acta Materialia, 2016, 119, 35-42.	3.8	71
72	Creep of magnesium strengthened with high volume fractions of yttria dispersoids. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 300, 235-244.	2.6	69

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73	Iron and Nickel Cellular Structures by Sintering of 3Dâ€Printed Oxide or Metallic Particle Inks. Advanced Engineering Materials, 2017, 19, 1600365.	1.6	68
74	Shape memory and superelasticity in polycrystalline Cuâ€“Alâ€“Ni microwires. Applied Physics Letters, 2009, 95, .	1.5	67
75	Density-Graded Cellular Aluminum. Advanced Engineering Materials, 2006, 8, 805-809.	1.6	66
76	Creep resistance of cast and aged Alâ€“0.1Zr and Alâ€“0.1Zrâ€“0.1Ti (at.%) alloys at 300â€“400Â°C. Scripta Materialia, 2008, 59, 387-390.	2.6	66
77	Iron Oxide Photoelectrode with Multidimensional Architecture for Highly Efficient Photoelectrochemical Water Splitting. Angewandte Chemie - International Edition, 2017, 56, 6583-6588.	7.2	66
78	Ni-Mn-Ga micro-trusses via sintering of 3D-printed inks containing elemental powders. Acta Materialia, 2018, 143, 20-29.	3.8	66
79	Coreâ€“shell nanoscale precipitates in Alâ€“0.06 at.% Sc microalloyed with Tb, Ho, Tm or Lu. Acta Materialia, 2010, 58, 134-145.	3.8	64
80	A new model to simulate the elastic properties of mineralized collagen fibril. Biomechanics and Modeling in Mechanobiology, 2011, 10, 147-160.	1.4	64
81	Sintering of micro-trusses created by extrusion-3D-printing of lunar regolith inks. Acta Astronautica, 2018, 143, 1-8.	1.7	64
82	Fatigue crack-growth in shape-memory NiTi and NiTiâ€“TiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 289, 208-216.	2.6	63
83	Creep properties of Al3Sc and Al3(Sc, X) intermetallics. Acta Materialia, 2000, 48, 3477-3487.	3.8	63
84	Microstructure evolution during solid-state foaming of titanium. Composites Science and Technology, 2003, 63, 2311-2316.	3.8	63
85	Microstructural evolution and creep properties of precipitation-strengthened Alâ€“0.06Scâ€“0.02Gd and Alâ€“0.06Scâ€“0.02Yb (at.%) alloys. Acta Materialia, 2011, 59, 5224-5237.	3.8	63
86	Role of silicon in the precipitation kinetics of dilute Al-Sc-Er-Zr alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 485-495.	2.6	63
87	Whisker alignment of Tiâ€“6Alâ€“4V/TiB composites during deformation by transformation superplasticity. International Journal of Plasticity, 2001, 17, 317-340.	4.1	61
88	Atom-probe tomographic study of Î³/Î³â€² interfaces and compositions in an aged Coâ€“Alâ€“W superalloy. Scripta Materialia, 2013, 68, 563-566.	2.6	61
89	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.	3.8	61
90	Cast near-eutectic Al-12.5â€¯wt.% Ce alloy with high coarsening and creep resistance. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 767, 138440.	2.6	61

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91	Thermal mismatch dislocations produced by large particles in a strain-hardening matrix. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 135, 179-184.	2.6	60
92	Effects of titanium substitutions for aluminum and tungsten in Co-10Ni-9Al-9W (at%) superalloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 705, 122-132.	2.6	60
93	Transformation-mismatch superplasticity in reinforced and unreinforced titanium. Acta Materialia, 1996, 44, 1063-1076.	3.8	59
94	Reactive Synthesis of Aluminide Intermetallics. Materials and Manufacturing Processes, 1995, 10, 373-403.	2.7	58
95	Effects of Mo and Mn microadditions on strengthening and over-aging resistance of nanoprecipitation-strengthened Al-Zr-Sc-Er-Si alloys. Acta Materialia, 2019, 165, 1-14.	3.8	58
96	Sustainability through alloy design: Challenges and opportunities. Progress in Materials Science, 2021, 117, 100722.	16.0	58
97	Effect of thermal history on the superplastic expansion of argon-filled pores in titanium: Part I kinetics and microstructure. Acta Materialia, 2004, 52, 2269-2278.	3.8	57
98	Atom probe tomographic study of a friction-stir-processed Alâ€“Mgâ€“Sc alloy. Acta Materialia, 2012, 60, 7078-7089.	3.8	57
99	Creep- and coarsening properties of Alâ€“0.06at.% Scâ€“0.06at.% Ti at 300â€“450Â°C. Acta Materialia, 2008, 56, 4369-4377.	3.8	56
100	Î³+Î³â€² microstructures in the Co-Ta-V and Co-Nb-V ternary systems. Acta Materialia, 2018, 151, 137-148.	3.8	56
101	Nanoscale precipitation and mechanical properties of Al-0.06 at.% Sc alloys microalloyed with Yb or Gd. Journal of Materials Science, 2006, 41, 7814-7823.	1.7	55
102	Roles of impurities on precipitation kinetics of dilute Alâ€“Sc alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3501-3509.	2.6	55
103	Influence of ruthenium on microstructural evolution in a model Co Al W superalloy. Acta Materialia, 2016, 117, 135-145.	3.8	54
104	Comparison between dislocation dynamics model predictions and experiments in precipitation-strengthened Alâ€“Liâ€“Sc alloys. Acta Materialia, 2014, 79, 382-395.	3.8	53
105	Finite-element analysis of thermal expansion and thermal mismatch stresses in a Cuâ€“60vol%ZrW2O8 composite. Composites Science and Technology, 2004, 64, 1895-1898.	3.8	52
106	Microstructural and creep properties of boron- and zirconium-containing cobalt-based superalloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 260-269.	2.6	52
107	Chemistry and structure of core/double-shell nanoscale precipitates in Alâ€“6.5Liâ€“0.07Scâ€“0.02Yb (at.%). Acta Materialia, 2011, 59, 3398-3409.	3.8	51
108	Effect of Agâ€“Au composition and acid concentration on dealloying front velocity and cracking during nanoporous gold formation. Acta Materialia, 2013, 61, 5561-5570.	3.8	51

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109	Iron Oxide Photoelectrode with Multidimensional Architecture for Highly Efficient Photoelectrochemical Water Splitting. Angewandte Chemie, 2017, 129, 6683-6688.	1.6	51
110	Increasing the creep resistance of Fe-Ni-Al-Cr superalloys via Ti additions by optimizing the B2/L21 ratio in composite nano-precipitates. Acta Materialia, 2018, 157, 142-154.	3.8	51
111	Measurement and modeling of creep in open-cell NiAl foams. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 2353-2363.	1.1	50
112	Creep of Al-Sc Microalloys with Rare-Earth Element Additions. Materials Science Forum, 2006, 519-521, 1035-1040.	0.3	49
113	Effect of Al, Ti and Cr additions on the Î³-Î³â€™ microstructure of W-free Co-Ta-V-Based superalloys. Acta Materialia, 2019, 172, 44-54.	3.8	49
114	Microstructure of Fe2O3 scaffolds created by freeze-casting and sintering. Materials Letters, 2015, 142, 56-59.	1.3	48
115	3D macroporous electrode and high-performance in lithium-ion batteries using SnO2 coated on Cu foam. Scientific Reports, 2016, 6, 18626.	1.6	48
116	Copper-zirconium tungstate composites exhibiting low and negative thermal expansion influenced by reinforcement phase transformations. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 1159-1165.	1.1	47
117	Load partitioning during compressive loading of a Mg/MgB2 composite. Acta Materialia, 2007, 55, 3467-3478.	3.8	47
118	Titanium foam-bioactive nanofiber hybrids for bone regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2008, 2, 455-462.	1.3	47
119	Non-isothermal transformation-mismatch plasticity: modeling and experiments on Tiâ€“6Alâ€“4V. Acta Materialia, 2001, 49, 199-210.	3.8	46
120	Porous and Foamed Amorphous Metals. MRS Bulletin, 2007, 32, 639-643.	1.7	46
121	Shape-memory NiTi with two-dimensional networks of micro-channels. Acta Biomaterialia, 2011, 7, 1862-1872.	4.1	46
122	Effect of titanium additions upon microstructure and properties of precipitation-strengthened Fe-Ni-Al-Cr ferritic alloys. Acta Materialia, 2017, 128, 103-112.	3.8	46
123	Porous Titanium by Electroâ€chemical Dissolution of Steel Spaceâ€holders. Advanced Engineering Materials, 2008, 10, 820-825.	1.6	45
124	Lattice strain evolution and load partitioning during creep of a Ni-based superalloy single crystal with rafted Î³â€² microstructure. Acta Materialia, 2017, 135, 77-87.	3.8	45
125	Titanium with aligned, elongated pores for orthopedic tissue engineering applications. Journal of Biomedical Materials Research - Part A, 2008, 84A, 402-412.	2.1	44
126	Creep properties and precipitate evolution in Alâ€“Li alloys microalloyed with Sc and Yb. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 300-311.	2.6	44

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127	In situ imaging of dealloying during nanoporous gold formation by transmission X-ray microscopy. Acta Materialia, 2013, 61, 1118-1125.	3.8	44
128	Superelasticity by reversible variants reorientation in a Niâ€“Mnâ€“Ga microwire with bamboo grains. Acta Materialia, 2015, 99, 373-381.	3.8	44
129	Lattice parameter misfit evolution during creep of a cobalt-based superalloy single crystal with cuboidal and rafted gamma-prime microstructures. Acta Materialia, 2017, 136, 118-125.	3.8	44
130	Elastic phase-strain distribution in a particulate-reinforced metal-matrix composite deforming by slip or creep. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2989-2997.	1.1	42
131	Effect of pore architecture on magnetic-field-induced strain in polycrystalline Niâ€“Mnâ€“Ga. Acta Materialia, 2011, 59, 2229-2239.	3.8	42
132	Dislocation-based modeling of long-term creep behaviors of Grade 91 steels. Acta Materialia, 2018, 149, 19-28.	3.8	42
133	Transformation superplasticity of zirconium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 2571-2582.	1.1	41
134	Mechanical Properties of Cast Ti-6Al-4V Lattice Block Structures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 441-449.	1.1	41
135	Preparation and Characterization of Directionally Freeze-cast Copper Foams. Metals, 2012, 2, 265-273.	1.0	40
136	Permeability measurements and modeling of topology-optimized metallic 3-D woven lattices. Acta Materialia, 2014, 81, 326-336.	3.8	40
137	Effect of directional solidification on texture and magnetic-field-induced strain in Niâ€“Mnâ€“Ga foams with coarse grains. Acta Materialia, 2015, 86, 95-101.	3.8	40
138	Microstructural evolution and high-temperature strength of a Î³(f.c.c.)/Î³â€™(L12) Coâ€“Alâ€“Wâ€“Tiâ€“B superalloy. Acta Materialia, 2019, 174, 427-438.	3.8	40
139	Microstructure and mechanical properties of Ti/W and Tiâ€“6Alâ€“4V/W composites fabricated by powder-metallurgy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 344, 103-112.	2.6	39
140	3D morphological evolution of porous titanium by x-ray micro- and nano-tomography. Journal of Materials Research, 2013, 28, 2444-2452.	1.2	39
141	Mechanical and magnetic behavior of oligocrystalline Niâ€“Mnâ€“Ga microwires. Journal of Alloys and Compounds, 2015, 624, 226-233.	2.8	39
142	Ambient- and elevated-temperature strengthening by Al3Zr-Nanoprecipitates and Al3Ni-Microfibers in a cast Al-2.9Ni-0.11Zr-0.02Si-0.005Er (at.%) alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 78-89.	2.6	39
143	Niâ€Moâ€Cr Foams Processed by Casting Replication of Sodium Aluminate Preforms. Advanced Engineering Materials, 2008, 10, 379-383.	1.6	38
144	Cavitation-resistant intergranular precipitates enhance creep performance of Î¸â€²-strengthened Al-Cu based alloys. Acta Materialia, 2022, 228, 117788.	3.8	38

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145	Composition profiles within Al3Li and Al3Scâ•Al3Li nanoscale precipitates in aluminum. Applied Physics Letters, 2008, 92, .	1.5	37
146	Bulk gold with hierarchical macro-, micro- and nano-porosity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2401-2406.	2.6	37
147	Effect of tungsten additions on the mechanical properties of Ti-6Al-4V. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 396, 99-106.	2.6	36
148	Microstructure and compressive behavior of ice-templated copper foams with directional, lamellar pores. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 679, 435-445.	2.6	36
149	NiTi-Nb micro-trusses fabricated via extrusion-based 3D-printing of powders and transient-liquid-phase sintering. Acta Biomaterialia, 2018, 76, 359-370.	4.1	36
150	Effects of Zn and Cr additions on precipitation and creep behavior of a dilute Alâ€“Zrâ€“Erâ€“Si alloy. Acta Materialia, 2019, 181, 249-261.	3.8	35
151	Effects of Cr on the properties of multicomponent cobalt-based superalloys with ultra high <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mi>Î³</mml:mi><mml:mo>â€™</mml:mo></mml:mrow></mml:math> volume fraction. Journal of Alloys and Compounds, 2020, 832, 154790.	2.8	35
152	Effect of tungsten dissolution on the mechanical properties of Tiâ€“W composites. Journal of Alloys and Compounds, 2005, 390, 62-66.	2.8	34
153	Shape-memory NiTiâ€“Nb foams. Journal of Materials Research, 2009, 24, 2107-2117.	1.2	34
154	Microstructure and Mechanical Properties of Reticulated Titanium Scrolls. Advanced Engineering Materials, 2011, 13, 1122-1127.	1.6	34
155	3D interconnected SnO₂-coated Cu foam as a high-performance anode for lithium-ion batteryÂapplications. RSC Advances, 2014, 4, 58059-58063.	1.7	34
156	Aging- and creep-resistance of a cast hypoeutectic Al-6.9Ce-9.3Mg (wt.%) alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 786, 139398.	2.6	34
157	Mn and Mo additions to a dilute Al-Zr-Sc-Er-Si-based alloy to improve creep resistance through solid-solution- and precipitation-strengthening. Acta Materialia, 2020, 194, 60-67.	3.8	34
158	Solid-state foaming of titanium by hydrogen-induced internal-stress superplasticity. Scripta Materialia, 2003, 49, 879-883.	2.6	33
159	Finite element modeling of creep deformation in cellular metals. Acta Materialia, 2007, 55, 3825-3834.	3.8	33
160	Synthesis, structure and mechanical properties of ice-templated tungsten foams. Journal of Materials Research, 2016, 31, 753-764.	1.2	33
161	Effect of tungsten concentration on microstructures of Co-10Ni-6Al-(0,2,4,6)W-6Ti (at%) cobalt-based superalloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 700, 481-486.	2.6	33
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