David C Dunand

List of Publications by Citations

358 papers	15,326 citations	64 h-index	109 g-index
372 ext. papers	17,365 ext. citations	6.1 avg, IF	7.19 L-index

#	Paper	IF	Citations
358	Porous Metals and Metallic Foams: Current Status and Recent Developments. *Advanced Engineering Materials*, **2008**, 10, 775-787	3.5	546
357	Precipitation strengthening at ambient and elevated temperatures of heat-treatable Al(Sc) alloys. *Acta Materialia*, **2002**, 50, 4021-4035	8.4	468
356	Porous NiTi for bone implants: a review. *Acta Biomaterialia*, **2008**, 4, 773-82	10.8	408
355	Criteria for developing castable, creep-resistant aluminum-based alloys – A review. *International Journal of Materials Research*, **2006**, 97, 246-265		347
354	Precipitation evolution in Al–0.1Sc, Al–0.1Zr and Al–0.1Sc–0.1Zr (at.%) alloys during isochronal aging. *Acta Materialia*, **2010**, 58, 5184-5195	8.4	311
353	Mechanical properties of Al(Sc,Zr) alloys at ambient and elevated temperatures. *Acta Materialia*, **2003**, 51, 4803-4814	8.4	295
352	Giant magnetic-field-induced strains in polycrystalline Ni-Mn-Ga foams. *Nature Materials*, **2009**, 8, 863-6	27	281
351	Size effects on magnetic actuation in Ni-Mn-Ga shape-memory alloys. *Advanced Materials*, **2011**, 23, 216-32	14	255
350	Processing of Titanium Foams. *Advanced Engineering Materials*, **2004**, 6, 369-376	3.5	253
349	Coarsening resistance at 400°C of precipitation-strengthened Al–Zr–Sc–Er alloys. *Acta Materialia*, **2011**, 59, 7029-7042	8.4	231
348	Ambient- and high-temperature mechanical properties of isochronally aged Al–0.06Sc, Al–0.06Zr and Al–0.06Sc–0.06Zr (at.%) alloys. *Acta Materialia*, **2011**, 59, 943-954	8.4	207
347	SMARTS – a spectrometer for strain measurement in engineering materials. *Applied Physics A: Materials Science and Processing*, **2002**, 74, s1707-s1709	2.6	200
346	Directionally freeze-cast titanium foam with aligned, elongated pores. *Acta Materialia*, **2008**, 56, 105-113	8.4	198
345	Hybrid bone implants: self-assembly of peptide amphiphile nanofibers within porous titanium. *Biomaterials*, **2008**, 29, 161-71	15.6	197
344	Precipitation evolution in Al–Zr and Al–Zr–Ti alloys during isothermal aging at 375–425°C. *Acta Materialia*, **2008**, 56, 114-127	8.4	188
343	Precipitation evolution in Al–Zr and Al–Zr–Ti alloys during aging at 450–600°C. *Acta Materialia*, **2008**, 56, 1182-1195	8.4	185
342	High strength, low stiffness, porous NiTi with superelastic properties. *Acta Biomaterialia*, **2005**, 1, 705-16	10.8	181

341	Microstructure and mechanical properties of Al-Mg-Zr alloys processed by selective laser melting. *Acta Materialia*, **2018**, 153, 35-44	8.4	175
340	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	5.3	175
339	Freeze casting A review of processing, microstructure and properties via the open data repository, FreezeCasting.net. *Progress in Materials Science*, **2018**, 94, 243-305	42.2	171
338	A bioactive titanium foam scaffold for bone repair. *Acta Biomaterialia*, **2005**, 1, 523-33	10.8	154
337	Phase transformation and thermal expansion of Cu/ZrW2O8 metal matrix composites. *Journal of Materials Research*, **1999**, 14, 780-789	2.5	154
336	Improving aging and creep resistance in a dilute AlSc alloy by microalloying with Si, Zr and Er. *Acta Materialia*, **2014**, 63, 73-85	8.4	149
335	Shape-memory NiTi foams produced by replication of NaCl space-holders. *Acta Biomaterialia*, **2008**, 4, 1996-2007	10.8	137
334	Metallic Architectures from 3D-Printed Powder-Based Liquid Inks. *Advanced Functional Materials*, **2015**, 25, 6985-6995	15.6	129
333	Structural evolution of nanoporous gold during thermal coarsening. *Acta Materialia*, **2012**, 60, 4972-4981	8.4	127
332	Effect of Mg addition on the creep and yield behavior of an AlSc alloy. *Acta Materialia*, **2003**, 51, 4751-4760	8.4	124
331	Printed origami structures. *Advanced Materials*, **2010**, 22, 2251-4	24	120
330	Role of silicon in accelerating the nucleation of Al3(Sc,Zr) precipitates in dilute AlScZr alloys. *Acta Materialia*, **2012**, 60, 4740-4752	8.4	119
329	Load partitioning in aluminum syntactic foams containing ceramic microspheres. *Acta Materialia*, **2006**, 54, 1501-1511	8.4	119
328	Effect of Er additions on ambient and high-temperature strength of precipitation-strengthened AlZrScSi alloys. *Acta Materialia*, **2012**, 60, 3643-3654	8.4	115
327	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	2.3	112
326	Effects of substituting rare-earth elements for scandium in a precipitation-strengthened Al0.08 at. %Sc alloy. *Scripta Materialia*, **2006**, 55, 437-440	5.6	110
325	Ductile Bulk Metallic Glass Foams. *Advanced Materials*, **2005**, 17, 484-486	24	109
324	Load partitioning between ferrite and cementite during elasto-plastic deformation of an ultrahigh-carbon steel. *Acta Materialia*, **2007**, 55, 1999-2011	8.4	108

323	Effects of Ti additions on the nanostructure and creep properties of precipitation-strengthened Al_3Sc alloys. *Acta Materialia*, **2005**, 53, 4225-4235	8.4	106
322	Mechanical properties of a density-graded replicated aluminum foam. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 489, 439-443	5.3	105
321	Creep properties and microstructure of a precipitation-strengthened ferritic $Fe_2Al_3Ni_2Cr$ alloy. *Acta Materialia*, **2014**, 71, 89-99	8.4	104
320	Shape-memory NiTi foams produced by solid-state replication with NaF. *Intermetallics*, **2007**, 15, 1612-1622	3.5	103
319	Mechanical properties of directionally freeze-cast titanium foams. *Acta Materialia*, **2011**, 59, 146-158	8.4	100
318	Numerical modeling of pore size and distribution in foamed titanium. *Mechanics of Materials*, **2006**, 38, 933-944	3.3	100
317	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	5.3	99
316	Erbium and ytterbium solubilities and diffusivities in aluminum as determined by nanoscale characterization of precipitates. *Acta Materialia*, **2009**, 57, 4081-4089	8.4	96
315	Processing and structure of open-celled amorphous metal foams. *Scripta Materialia*, **2005**, 52, 335-339	5.6	94
314	Evolution of nanoscale precipitates in Al microalloyed with Sc and Er. *Acta Materialia*, **2009**, 57, 4022-4031	8.4	93
313	Strain and texture evolution during mechanical loading of a crack tip in martensitic shape-memory NiTi. *Acta Materialia*, **2007**, 55, 3929-3942	8.4	93
312	Effect of laser rescanning on the grain microstructure of a selective laser melted Al-Mg-Zr alloy. *Materials Characterization*, **2018**, 143, 34-42	3.9	92
311	Model for creep threshold stress in precipitation-strengthened alloys with coherent particles. *Scripta Materialia*, **2002**, 47, 503-508	5.6	89
310	Synthesis, structure, and mechanical properties of Ni_3Al and Ni_2CrAl superalloy foams. *Acta Materialia*, **2004**, 52, 1283-1295	8.4	88
309	Effects of Yb and Zr microalloying additions on the microstructure and mechanical properties of dilute Al_3Sc alloys. *Acta Materialia*, **2011**, 59, 7615-7626	8.4	84
308	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	2.3	83
307	Phase fraction, texture and strain evolution in superelastic NiTi and $NiTi_2TiC$ composites investigated by neutron diffraction. *Acta Materialia*, **1999**, 47, 3353-3366	8.4	82
306	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	8.4	81

305	Titanium foams produced by solid-state replication of NaCl powders. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 528, 691-697	5.3	79
304	Towards an integrated materials characterization toolbox. *Journal of Materials Research*, **2011**, 26, 1341-1383	2.3	75
303	Syntactic bulk metallic glass foam. *Applied Physics Letters*, **2004**, 84, 1108-1110	3.4	74
302	Increasing magnetoplasticity in polycrystalline Ni-Mn-Ga by reducing internal constraints through porosity. *Physical Review Letters*, **2007**, 99, 247201	7.4	72
301	Effects of Pore Morphology and Bone Ingrowth on Mechanical Properties of Microporous Titanium as an Orthopaedic Implant Material. *Materials Transactions*, **2004**, 45, 1124-1131	1.3	72
300	Morphological and topological analysis of coarsened nanoporous gold by x-ray nanotomography. *Applied Physics Letters*, **2010**, 96, 043122	3.4	70
299	Titanium with controllable pore fractions by thermoreversible gelcasting of TiH2. *Acta Materialia*, **2008**, 56, 5147-5157	8.4	69
298	Synthesis of nickel aluminide foams by pack-aluminization of nickel foams. *Intermetallics*, **2001**, 9, 581-589	3.5	69
297	Plasticity and damage in cellular amorphous metals. *Acta Materialia*, **2005**, 53, 4427-4440	8.4	68
296	Ferritic Alloys with Extreme Creep Resistance via Coherent Hierarchical Precipitates. *Scientific Reports*, **2015**, 5, 16327	4.9	66
295	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	8.4	66
294	Multicomponent strengthened Co-based superalloys with increased solvus temperatures and reduced mass densities. *Acta Materialia*, **2018**, 147, 284-295	8.4	64
293	Creep properties of coarse-grained Al(Sc) alloys at 300 C. *Scripta Materialia*, **1999**, 40, 691-696	5.6	62
292	3D ink-extrusion additive manufacturing of CoCrFeNi high-entropy alloy micro-lattices. *Nature Communications*, **2019**, 10, 904	17.4	60
291	Strengthening mechanisms in aluminum containing coherent Al3Sc precipitates and incoherent Al2O3 dispersoids. *Acta Materialia*, **2007**, 55, 1299-1308	8.4	60
290	A new model to simulate the elastic properties of mineralized collagen fibril. *Biomechanics and Modeling in Mechanobiology*, **2011**, 10, 147-60	3.8	59
289	Fatigue crack-growth in shape-memory NiTi and NiTiTiC composites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2000**, 289, 208-216	5.3	59
288	Shape memory and superelasticity in polycrystalline CuAlNi microwires. *Applied Physics Letters*, **2009**, 95, 171906	3.4	58

287	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	5.3	58
286	Core□shell nanoscale precipitates in Al□0.06 at.% Sc microalloyed with Tb, Ho, Tm or Lu. *Acta Materialia*, **2010**, 58, 134-145	8.4	57
285	Reactive Synthesis of Aluminide Intermetallics. *Materials and Manufacturing Processes*, **1995**, 10, 373-403	4.1	57
284	Effect of reinforcement connectivity on the elasto-plastic behavior of aluminum composites containing sub-micron alumina particles. *Acta Materialia*, **2003**, 51, 6105-6121	8.4	56
283	Whisker alignment of Ti□Al□V/TiB composites during deformation by transformation superplasticity. *International Journal of Plasticity*, **2001**, 17, 317-340	7.6	56
282	Transformation-mismatch superplasticity in reinforced and unreinforced titanium. *Acta Materialia*, **1996**, 44, 1063-1076	8.4	56
281	Microstructure evolution during solid-state foaming of titanium. *Composites Science and Technology* , **2003**, 63, 2311-2316	8.6	55
280	Iron and Nickel Cellular Structures by Sintering of 3D-Printed Oxide or Metallic Particle Inks . *Advanced Engineering Materials*, **2017**, 19, 1600365	3.5	54
279	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	8.4	54
278	Iron Oxide Photoelectrode with Multidimensional Architecture for Highly Efficient Photoelectrochemical Water Splitting. *Angewandte Chemie - International Edition*, **2017**, 56, 6583-6588	16.4	53
277	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	8.4	53
276	Atom-probe tomographic study of □′ interfaces and compositions in an aged Co□Al□W superalloy. *Scripta Materialia*, **2013**, 68, 563-566	5.6	53
275	Creep resistance of cast and aged Al□0.1Zr and Al□0.1Zr□0.1Ti (at.%) alloys at 300□400□°C. *Scripta Materialia*, **2008**, 59, 387-390	5.6	51
274	Microstructural evolution and creep properties of precipitation-strengthened Al□0.06Sc□0.02Gd and Al□0.06Sc□0.02Yb (at.%) alloys. *Acta Materialia*, **2011**, 59, 5224-5237	8.4	50
273	Creep properties of Al3Sc and Al3(Sc, X) intermetallics. *Acta Materialia*, **2000**, 48, 3477-3487	8.4	50
272	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	4.3	49
271	Finite-element analysis of thermal expansion and thermal mismatch stresses in a Cu□30vol%ZrW2O8 composite. *Composites Science and Technology*, **2004**, 64, 1895-1898	8.6	48
270	Measurement and modeling of creep in open-cell NiAl foams. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2003**, 34, 2353-2363	2.3	48

269	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	5.3	46
268	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	8.4	46
267	Criteria for developing castable, creep-resistant aluminum-based alloys □A review. *International Journal of Materials Research*, **2022**, 97, 246-265	0.5	46
266	Ni-Mn-Ga micro-trusses via sintering of 3D-printed inks containing elemental powders. *Acta Materialia*, **2018**, 143, 20-29	8.4	45
265	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	5.3	45
264	Creep of Al-Sc Microalloys with Rare-Earth Element Additions. *Materials Science Forum*, **2006**, 519-521, 1035-1040	0.4	45
263	3D macroporous electrode and high-performance in lithium-ion batteries using SnO2 coated on Cu foam. *Scientific Reports*, **2016**, 6, 18626	4.9	44
262	Load partitioning during compressive loading of a Mg/MgB2 composite. *Acta Materialia*, **2007**, 55, 3467-3478	8.4	44
261	Creep- and coarsening properties of Al□0.06at.% Sc□0.06at.% Ti at 300□450□C. *Acta Materialia*, **2008** , 56, 4369-4377	8.4	44
260	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	5.3	44
259	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	2.3	43
258	Microstructure of Fe2O3 scaffolds created by freeze-casting and sintering. *Materials Letters*, **2015**, 142, 56-59	3.3	42
257	Titanium foam-bioactive nanofiber hybrids for bone regeneration. *Journal of Tissue Engineering and Regenerative Medicine*, **2008**, 2, 455-62	4.4	42
256	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	8.4	42
255	Chemistry and structure of core/double-shell nanoscale precipitates in Al□3.5Li□0.07Sc□0.02Yb (at.%). *Acta Materialia*, **2011**, 59, 3398-3409	8.4	41
254	Transformation superplasticity of zirconium. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **1998**, 29, 2571-2582	2.3	41
253	Non-isothermal transformation-mismatch plasticity: modeling and experiments on Ti□Al□4V. *Acta Materialia*, **2001**, 49, 199-210	8.4	41
252	Effect of Ag□Au composition and acid concentration on dealloying front velocity and cracking during nanoporous gold formation. *Acta Materialia*, **2013**, 61, 5561-5570	8.4	40

251	Influence of ruthenium on microstructural evolution in a model CoAlW superalloy. *Acta Materialia*, **2016**, 117, 135-145	8.4	39
250	Microstructure and Creep Properties of Boron- and Zirconium-Containing Cobalt-based Superalloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 682, 260-269	5.3	39
249	Shape-memory NiTi with two-dimensional networks of micro-channels. *Acta Biomaterialia*, **2011**, 7, 1862-1728	7.2	39
248	Titanium with aligned, elongated pores for orthopedic tissue engineering applications. *Journal of Biomedical Materials Research - Part A*, **2008**, 84, 402-12	5.4	39
247	□□ microstructures in the Co-Ta-V and Co-Nb-V ternary systems. *Acta Materialia*, **2018**, 151, 137-148	8.4	38
246	Roles of impurities on precipitation kinetics of dilute Al□c alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 3501-3509	5.3	38
245	Porous Titanium by Electro-chemical Dissolution of Steel Space-holders. *Advanced Engineering Materials*, **2008**, 10, 820-825	3.5	38
244	Porous and Foamed Amorphous Metals. *MRS Bulletin*, **2007**, 32, 639-643	3.2	38
243	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	2.3	37
242	Creep properties and precipitate evolution in Al□i alloys microalloyed with Sc and Yb. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 550, 300-311	5.3	36
241	In situ imaging of dealloying during nanoporous gold formation by transmission X-ray microscopy. *Acta Materialia*, **2013**, 61, 1118-1125	8.4	36
240	Bulk gold with hierarchical macro-, micro- and nano-porosity. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 2401-2406	5.3	36
239	Ni-Mo-Cr Foams Processed by Casting Replication of Sodium Aluminate Preforms. *Advanced Engineering Materials*, **2008**, 10, 379-383	3.5	36
238	3D morphological evolution of porous titanium by x-ray micro- and nano-tomography. *Journal of Materials Research*, **2013**, 28, 2444-2452	2.5	35
237	Mechanical Properties of Cast Ti-6Al-4V Lattice Block Structures. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2008**, 39, 441-449	2.3	35
236	Superelasticity by reversible variants reorientation in a Ni□MnG□a microwire with bamboo grains. *Acta Materialia*, **2015**, 99, 373-381	8.4	34
235	Mechanical and magnetic behavior of oligocrystalline Ni□MnG□a microwires. *Journal of Alloys and Compounds*, **2015**, 624, 226-233	5.7	34
234	Permeability measurements and modeling of topology-optimized metallic 3-D woven lattices. *Acta Materialia*, **2014**, 81, 326-336	8.4	34

233	Effect of directional solidification on texture and magnetic-field-induced strain in NiMnGa foams with coarse grains. *Acta Materialia*, **2015**, 86, 95-101	8.4	34
232	Effect of pore architecture on magnetic-field-induced strain in polycrystalline NiMnGa. *Acta Materialia*, **2011**, 59, 2229-2239	8.4	34
231	Effect of titanium additions upon microstructure and properties of precipitation-strengthened Fe-Ni-Al-Cr ferritic alloys. *Acta Materialia*, **2017**, 128, 103-112	8.4	33
230	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	5.3	33
229	Preparation and Characterization of Directionally Freeze-cast Copper Foams. *Metals*, **2012**, 2, 265-273	2.3	33
228	Finite element modeling of creep deformation in cellular metals. *Acta Materialia*, **2007**, 55, 3825-3834	8.4	33
227	3D interconnected SnO2-coated Cu foam as a high-performance anode for lithium-ion battery applications. *RSC Advances*, **2014**, 4, 58059-58063	3.7	32
226	Atom probe tomographic study of a friction-stir-processed AlMgSc alloy. *Acta Materialia*, **2012**, 60, 7078-7089	8.4	32
225	Microstructure and Mechanical Properties of Reticulated Titanium Scrolls. *Advanced Engineering Materials*, **2011**, 13, 1122-1127	3.5	32
224	Shape-memory NiTiNb foams. *Journal of Materials Research*, **2009**, 24, 2107-2117	2.5	32
223	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	8.4	31
222	Composition profiles within Al3Li and Al3ScAl3Li nanoscale precipitates in aluminum. *Applied Physics Letters*, **2008**, 92, 124107	3.4	31
221	Comparison between dislocation dynamics model predictions and experiments in precipitation-strengthened AlLiSc alloys. *Acta Materialia*, **2014**, 79, 382-395	8.4	30
220	Lattice strain evolution and load partitioning during creep of a Ni-based superalloy single crystal with rafted γ′ microstructure. *Acta Materialia*, **2017**, 135, 77-87	8.4	29
219	Solid-state foaming of titanium by hydrogen-induced internal-stress superplasticity. *Scripta Materialia*, **2003**, 49, 879-883	5.6	29
218	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	5.3	29
217	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	5.3	28
216	Structure and mechanical properties of Ti–Al–V with a replicated network of elongated pores. *Acta Materialia*, **2011**, 59, 640-650	8.4	28

215	Sintering of micro-trusses created by extrusion-3D-printing of lunar regolith inks. *Acta Astronautica*, **2018**, 143, 1-8	2.9	28
214	Cast near-eutectic Al-12.5 wt.% Ce alloy with high coarsening and creep resistance. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 767, 138440	5.3	27
213	Effect of Al, Ti and Cr additions on the □ microstructure of W-free Co-Ta-V-Based superalloys. *Acta Materialia*, **2019**, 172, 44-54	8.4	27
212	Synthesis, structure and mechanical properties of ice-templated tungsten foams. *Journal of Materials Research*, **2016**, 31, 753-764	2.5	27
211	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	8.4	27
210	In Operando Strain Measurement of Bicontinuous Silicon-Coated Nickel Inverse Opal Anodes for Li-Ion Batteries. *Advanced Energy Materials*, **2015**, 5, 1500466	21.8	27
209	Transformation superplasticity of iron and Fe/TiC metal matrix composites. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **1998**, 29, 565-575	2.3	27
208	Morphological analysis of pores in directionally freeze-cast titanium foams. *Journal of Materials Research*, **2009**, 24, 117-124	2.5	26
207	Ti□Al□V with micro- and macropores produced by powder sintering and electrochemical dissolution of steel wires. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 849-853	5.3	26
206	Effect of thermal history on the superplastic expansion of argon-filled pores in titanium: Part II modeling of kinetics. *Acta Materialia*, **2004**, 52, 2279-2291	8.4	26
205	Elasto-plastic load transfer in bulk metallic glass composites containing ductile particles. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2003**, 34, 1787-1797	2.3	26
204	Iron foams created by directional freeze casting of iron oxide, reduction and sintering. *Materials Letters*, **2017**, 191, 112-115	3.3	25
203	Processing of NiTi Foams by Transient Liquid Phase Sintering. *Journal of Materials Engineering and Performance*, **2011**, 20, 511-516	1.6	25
202	Porous NiTi by creep expansion of argon-filled pores. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 523, 70-76	5.3	25
201	Effect of tungsten dissolution on the mechanical properties of Ti□W composites. *Journal of Alloys and Compounds*, **2005**, 390, 62-66	5.7	25
200	Microstructure and mechanical properties of Ti/W and Ti□Al□V/W composites fabricated by powder-metallurgy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 344, 103-112	5.3	25
199	Microstructure and Processing of 3D Printed Tungsten Microlattices and Infiltrated W□Cu Composites. *Advanced Engineering Materials*, **2018**, 20, 1800354	3.5	24
198	Mechanical anisotropy of shape-memory NiTi with two-dimensional networks of micro-channels. *Acta Materialia*, **2011**, 59, 4616-4630	8.4	24

197	Power-law creep in near-equiatomic nickel–titanium alloys. *Scripta Materialia*, **2007**, 57, 377-380	5.6	24
196	NiTi-Nb micro-trusses fabricated via extrusion-based 3D-printing of powders and transient-liquid-phase sintering. *Acta Biomaterialia*, **2018**, 76, 359-370	10.8	24
195	Effect of directional solidification and porosity upon the superelasticity of Cu–Al–Ni shape-memory alloys. *Materials & Design*, **2015**, 80, 28-35		23
194	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	5.3	23
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