

David C Dunand

List of Publications by Year in Descending Order

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

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	Microstructure and creep properties of cast near-eutectic Al-Ce-Ni alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 833, 142551	5.3	2
357	Finite element modeling of creep deformation in dendritic alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 831, 142171	5.3	1
356	Evolution of directionally freeze-cast Fe ₂ O ₃ and Fe ₂ O ₃ +NiO green bodies during reduction and sintering to create lamellar Fe and Fe-20Ni foams. <i>Journal of Alloys and Compounds</i> , 2022 , 889, 161707	5.7	1
355	Cavitation-resistant intergranular precipitates enhance creep performance of β -strengthened Al-Cu based alloys. <i>Acta Materialia</i> , 2022 , 228, 117788	8.4	5
354	Comparing evolution of precipitates and strength upon aging of cast and laser-remelted Al ₈ Ce-0.2Sc-0.1Zr (wt.%). <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 840, 142990	5.3	0
353	Operando X-ray diffraction study of thermal and phase evolution during laser powder bed fusion of Al-Sc-Zr elemental powder blends. <i>Additive Manufacturing</i> , 2022 , 102806	6.1	0
352	Criteria for developing castable, creep-resistant aluminum-based alloys [A review]. <i>International Journal of Materials Research</i> , 2022 , 97, 246-265	0.5	46
351	Creep properties and microstructure evolution at 260°C of AlSi10Mg manufactured via laser powder-bed fusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 843, 143075	5.3	3
350	Solidification microstructure, aging evolution and creep resistance of laser powder-bed fused Al-7Ce-8Mg (wt%). <i>Additive Manufacturing</i> , 2022 , 55, 102862	6.1	1
349	Evolution of lamellar architecture and microstructure during redox cycling of Fe-Co and Fe-Cu foams. <i>Journal of Alloys and Compounds</i> , 2022 , 165606	5.7	0
348	Effect of oxide dispersoids on precipitation-strengthened Al-1.7Zr (wt %) alloys produced by laser powder-bed fusion. <i>Additive Manufacturing</i> , 2022 , 56, 102933	6.1	0
347	Microstructure and properties of additively-manufactured WC-Co microlattices and WC-Cu composites. <i>Acta Materialia</i> , 2021 , 221, 117420	8.4	1
346	Microstructure evolution during reduction and sintering of 3D-extrusion-printed Bi ₂ O ₃ +TeO ₂ inks to form Bi ₂ Te ₃ . <i>Acta Materialia</i> , 2021 , 221, 117422	8.4	2
345	Complex-shaped, finely-featured ZrC/W composites via shape-preserving reactive melt infiltration of porous WC structures fabricated by 3-D ink extrusion. <i>Additive Manufacturing Letters</i> , 2021 , 100018		1
344	Microstructure and defects in a Ni-Cr-Al-Ti model superalloy processed by laser powder bed fusion. <i>Materials and Design</i> , 2021 , 201, 109531	8.1	12
343	Increasing γ volume fraction in Co-Nb- and Co-Ta-based superalloys. <i>Journal of Materials Research and Technology</i> , 2021 , 11, 2305-2313	5.5	0
342	Microstructure and compressive properties of 3D-extrusion-printed, aluminized cobalt-based superalloy microlattices. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 815, 141262	5.3	1

341	Bulk Nanostructured Metal from Multiply-Twinned Nanowires. <i>Nano Letters</i> , 2021 , 21, 5627-5632	11.5	
340	Sustainability through alloy design: Challenges and opportunities. <i>Progress in Materials Science</i> , 2021 , 117, 100722	42.2	15
339	Creep behavior and post-creep thermoelectric performance of the n-type Skutterudite alloy Yb _{0.3} Co ₄ Sb ₁₂ . <i>Journal of Materiomics</i> , 2021 , 7, 89-97	6.7	2
338	Individual and synergistic effects of Mn and Mo micro-additions on precipitation and strengthening of a dilute Al _{0.7} Sc-Er-Si alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 800, 140288	5.3	6
337	Effects of W micro-additions on precipitation kinetics and mechanical properties of an Al _{0.7} Mn _{0.3} Mo _{0.3} Si _{0.3} Er alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 803, 140550	5.3	3
336	Microstructure and Mechanical Properties of a Precipitation-Hardened Al _{0.7} Mn _{0.3} Er Alloy. <i>Minerals, Metals and Materials Series</i> , 2021 , 239-244	0.3	
335	Kirkendall pore evolution during interdiffusion and homogenization of titanium-coated nickel microwires. <i>Intermetallics</i> , 2021 , 134, 107199	3.5	1
334	Thermal stability and influence of Y ₂ O ₃ dispersoids on the heat treatment response of an additively manufactured ODS Ni-Cr-Al-Ti γ superalloy. <i>Journal of Materials Research and Technology</i> , 2021 ,	5.5	2
333	Solute-induced strengthening during creep of an aged-hardened Al-Mn-Zr alloy. <i>Acta Materialia</i> , 2021 , 219, 117268	8.4	2
332	Evolution of Y ₂ O ₃ dispersoids during laser powder bed fusion of oxide dispersion strengthened Ni-Cr-Al-Ti γ superalloy. <i>Additive Manufacturing</i> , 2021 , 47, 102224	6.1	3
331	Mechanical properties of meteoritic Fe ₉₀ Ni ₁₀ alloys for in-situ extraterrestrial structures. <i>Acta Astronautica</i> , 2021 , 189, 465-475	2.9	1
330	Kinetics of alloy formation and densification in Fe-Ni-Mo microfilaments extruded from oxide- or metal-powder inks. <i>Acta Materialia</i> , 2020 , 193, 51-60	8.4	8
329	Integrated porous cobalt oxide/cobalt anode with micro- and nano-pores for lithium ion battery. <i>Applied Surface Science</i> , 2020 , 525, 146592	6.7	10
328	Hierarchical Structural Changes During Redox Cycling of Fe-Based Lamellar Foams Containing YSZ, CeO ₂ , or ZrO ₂ . <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 27190-27201	9.5	3
327	Finite Element Model for Coupled Diffusion and Elastoplastic Deformation during High-Temperature Oxidation of Fe to FeO. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 080532	3.9	0
326	3D ink-extrusion printing and sintering of Ti, Ti-TiB and Ti-TiC microlattices. <i>Additive Manufacturing</i> , 2020 , 35, 101412	6.1	9
325	Ultrafine-grained Al-Mg-Zr alloy processed by shear-assisted extrusion with high thermal stability. <i>Scripta Materialia</i> , 2020 , 186, 326-330	5.6	8
324	Effect of Cr additions on a γ microstructure and creep behavior of a Co-based superalloy with low W content. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 778, 139108	5.3	13

323	Effect of aging on coarsening- and creep resistance of a Ti-modified FeNiAlCrMo ferritic steel with L21/B2 composite precipitates. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 776, 138987	5.3	3
322	Aging- and creep-resistance of a cast hypoeutectic Al-6.9Ce-9.3Mg (wt.%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 786, 139398	5.3	16
321	Porous Titanium Cylinders Obtained by the Freeze-Casting Technique: Influence of Process Parameters on Porosity and Mechanical Behavior. <i>Metals</i> , 2020 , 10, 188	2.3	15
320	Effects of Mn and Mo Micro-additions on AlZrScErBi Mechanical Properties. <i>Minerals, Metals and Materials Series</i> , 2020 , 312-317	0.3	
319	Mn and Mo additions to a dilute Al-Zr-Sc-Er-Si-based alloy to improve creep resistance through solid-solution- and precipitation-strengthening. <i>Acta Materialia</i> , 2020 , 194, 60-67	8.4	15
318	Influence of γ -raft orientation on creep resistance of monocrystalline Co-based superalloys. <i>Materialia</i> , 2020 , 12, 100678	3.2	5
317	A fully coupled diffusional-mechanical finite element modeling for tin oxide-coated copper anode system in lithium-ion batteries. <i>Computational Materials Science</i> , 2020 , 172, 109343	3.2	5
316	Tungsten solubility in L12-ordered Al ₃ Er and Al ₃ Zr nanoprecipitates formed by aging in an aluminum matrix. <i>Journal of Alloys and Compounds</i> , 2020 , 820, 153383	5.7	10
315	In operando tomography reveals degradation mechanisms in lamellar iron foams during redox cycling at 800°C. <i>Journal of Power Sources</i> , 2020 , 448, 227463	8.9	10
314	3D-printed tungsten sheet-gyroids via reduction and sintering of extruded WO ₃ -nanopowder inks. <i>Additive Manufacturing</i> , 2020 , 36, 101613	6.1	1
313	SnO ₂ -Ag composites with high thermal cycling stability created by Ag infiltration of 3D ink-extruded SnO ₂ microlattices. <i>Applied Materials Today</i> , 2020 , 21, 100794	6.6	3
312	Synthesis of precipitation-strengthened Al-Sc, Al-Zr and Al-Sc-Zr alloys via selective laser melting of elemental powder blends. <i>Additive Manufacturing</i> , 2020 , 36, 101461	6.1	6
311	Effects of pore morphology on the cyclical oxidation/reduction of iron foams created via camphene-based freeze casting. <i>Journal of Alloys and Compounds</i> , 2020 , 845, 156278	5.7	11
310	Effects of W and Si microadditions on microstructure and the strength of dilute precipitation-strengthened AlZrEr alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 798, 140159	5.3	8
309	Low-density, W-free CoNbWAl-based superalloys with γ microstructure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 796, 139977	5.3	4
308	High-temperature mechanical properties of γ CoNiWAl superalloy microlattices. <i>Scripta Materialia</i> , 2020 , 188, 146-150	5.6	5
307	Microstructural stability and mechanical behavior of a Co ₂ ONi ₂ Al ₂ W ₂ Ti at.% superalloy. <i>Journal of Alloys and Compounds</i> , 2020 , 848, 156378	5.7	1
306	FeNi foams self-heal during redox cycling via reversible formation/homogenization of a ductile Ni scaffold. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 19375-19386	13	5

305	Effects of Cr on the properties of multicomponent cobalt-based superalloys with ultra high σ volume fraction. <i>Journal of Alloys and Compounds</i> , 2020 , 832, 154790	5.7	14
304	Creep behavior and postcreep thermoelectric performance of the n-type half-Heusler alloy Hf _{0.3} Zr _{0.7} NiSn _{0.98} Sb _{0.02} . <i>Materials Today Physics</i> , 2019 , 9, 100134	8	16
303	Effects of Zn and Cr additions on precipitation and creep behavior of a dilute Al ₂ ZrErSi alloy. <i>Acta Materialia</i> , 2019 , 181, 249-261	8.4	20
302	Cast near-eutectic Al-12.5 wt.% Ce alloy with high coarsening and creep resistance. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 767, 138440	5.3	27
301	Ice-Templated W-Cu Composites with High Anisotropy. <i>Scientific Reports</i> , 2019 , 9, 476	4.9	9
300	Microstructural evolution and high-temperature strength of a (F.c.c.)/(L12) CoAlW ₂ TiB superalloy. <i>Acta Materialia</i> , 2019 , 174, 427-438	8.4	20
299	Ambient- and elevated-temperature strengthening by Al ₃ Zr-Nanoprecipitates and Al ₃ Ni-Microfibers in a cast Al-2.9Ni-0.11Zr-0.02Si-0.005Er (at.%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 759, 78-89	5.3	28
298	Effect of Al, Ti and Cr additions on the μ microstructure of W-free Co-Ta-V-Based superalloys. <i>Acta Materialia</i> , 2019 , 172, 44-54	8.4	27
297	Improving coarsening resistance of dilute Al-Sc-Zr-Si alloys with Sr or Zn additions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 754, 447-456	5.3	9
296	The effect of solidification direction with respect to gravity on ice-templated TiO ₂ microstructures. <i>Journal of the European Ceramic Society</i> , 2019 , 39, 3180-3193	6	7
295	3D ink-extrusion additive manufacturing of CoCrFeNi high-entropy alloy micro-lattices. <i>Nature Communications</i> , 2019 , 10, 904	17.4	60
294	Microstructure and Mechanical Properties of an Al-Zr-Er High Temperature Alloy Microalloyed with Tungsten. <i>Minerals, Metals and Materials Series</i> , 2019 , 379-383	0.3	1
293	Effects of Zr Additions on Structure and Microhardness Evolution of Eutectic Al-6Ni Alloy. <i>Minerals, Metals and Materials Series</i> , 2019 , 373-377	0.3	
292	Ni-Al ₂ O ₃ nacre-like composites through hot-pressing of freeze-cast foams. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 743, 190-196	5.3	14
291	Effects of Si and Fe micro-additions on the aging response of a dilute Al-0.08Zr-0.08Hf-0.045Er at.% alloy. <i>Materials Characterization</i> , 2019 , 147, 72-83	3.9	17
290	Microstructure and porosity evolution during sintering of Ni-Mn-Ga wires printed from inks containing elemental powders. <i>Intermetallics</i> , 2019 , 104, 113-123	3.5	14
289	Effect of diffusion distance on evolution of Kirkendall pores in titanium-coated nickel wires. <i>Intermetallics</i> , 2019 , 104, 124-132	3.5	7
288	Effects of Mo and Mn microadditions on strengthening and over-aging resistance of nanoprecipitation-strengthened Al-Zr-Sc-Er-Si alloys. <i>Acta Materialia</i> , 2019 , 165, 1-14	8.4	42

287	[(L12) precipitate evolution during isothermal aging of a Co Al W Ni superalloy. <i>Acta Materialia</i> , 2019 , 164, 654-662	8.4	17
286	Effect of U and Th trace additions on the precipitation strengthening of Al0.09Sc (at.%) alloy. <i>Journal of Materials Science</i> , 2019 , 54, 3485-3495	4.3	7
285	Effect of micro-additions of Ge, In or Sn on precipitation in dilute Al-Sc-Zr alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 739, 427-436	5.3	14
284	Structure and growth of core-shell nanoprecipitates in AlErScZrBi high-temperature alloys. <i>Journal of Materials Science</i> , 2019 , 54, 1857-1871	4.3	6
283	Structural evolution of directionally freeze-cast iron foams during oxidation/reduction cycles. <i>Acta Materialia</i> , 2019 , 162, 90-102	8.4	22
282	Compressive creep behavior of hot-pressed Mg1.96Al0.04Si0.97Bi0.03. <i>Scripta Materialia</i> , 2018 , 148, 10-14	5.6	7
281	Processing and Characterization of Liquid-Phase Sintered NiTi Woven Structures. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 70-76	2.8	2
280	Scandium-Enriched Nanoprecipitates in Aluminum Providing Enhanced Coarsening and Creep Resistance. <i>Minerals, Metals and Materials Series</i> , 2018 , 1589-1594	0.3	1
279	Multicomponent Strengthened Co-based superalloys with increased solvus temperatures and reduced mass densities. <i>Acta Materialia</i> , 2018 , 147, 284-295	8.4	64
278	Equal Channel Angular Pressing of a Newly Developed Precipitation Hardenable Scandium Containing Aluminum Alloy. <i>Minerals, Metals and Materials Series</i> , 2018 , 423-429	0.3	
277	Mechanical Behavior of Three-Dimensional Braided Nickel-Based Superalloys Synthesized via Pack Cementation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 817-821	2.3	
276	Development of High-Strength and High-Electrical-Conductivity Aluminum Alloys for Power Transmission Conductors. <i>Minerals, Metals and Materials Series</i> , 2018 , 247-251	0.3	2
275	Dislocation-based modeling of long-term creep behaviors of Grade 91 steels. <i>Acta Materialia</i> , 2018 , 149, 19-28	8.4	16
274	Freeze casting [A review of processing, microstructure and properties via the open data repository, FreezeCasting.net. <i>Progress in Materials Science</i> , 2018 , 94, 243-305	42.2	171
273	Effects of Nb and Ta additions on the strength and coarsening resistance of precipitation-strengthened Al-Zr-Sc-Er-Si alloys. <i>Materials Characterization</i> , 2018 , 141, 260-266	3.9	21
272	Effect of hafnium micro-addition on precipitate microstructure and creep properties of a Fe-Ni-Al-Cr-Ti ferritic superalloy. <i>Acta Materialia</i> , 2018 , 153, 126-135	8.4	11
271	Microstructure and mechanical properties of Al-Mg-Zr alloys processed by selective laser melting. <i>Acta Materialia</i> , 2018 , 153, 35-44	8.4	175
270	Effect of laser rescanning on the grain microstructure of a selective laser melted Al-Mg-Zr alloy. <i>Materials Characterization</i> , 2018 , 143, 34-42	3.9	92

269	Microstructures in the Co-Ta-V and Co-Nb-V ternary systems. <i>Acta Materialia</i> , 2018 , 151, 137-148	8.4	38
268	Ni-Mn-Ga micro-trusses via sintering of 3D-printed inks containing elemental powders. <i>Acta Materialia</i> , 2018 , 143, 20-29	8.4	45
267	Surface-oxidized, freeze-cast cobalt foams: Microstructure, mechanical properties and electrochemical performance. <i>Acta Materialia</i> , 2018 , 142, 213-225	8.4	17
266	A Simple and Economical Device to Process Ti Cylinders with Elongated Porosity by Freeze-Casting Techniques: Design and Manufacturing. <i>Key Engineering Materials</i> , 2018 , 770, 255-261	0.4	1
265	Increasing the creep resistance of Fe-Ni-Al-Cr superalloys via Ti additions by optimizing the B2/L21 ratio in composite nano-precipitates. <i>Acta Materialia</i> , 2018 , 157, 142-154	8.4	27
264	Effect of Si micro-addition on creep resistance of a dilute Al-Sc-Zr-Er alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 734, 27-33	5.3	16
263	Microstructure and Processing of 3D Printed Tungsten Microlattices and Infiltrated W/Cu Composites. <i>Advanced Engineering Materials</i> , 2018 , 20, 1800354	3.5	24
262	Dislocation dynamics simulations of precipitation-strengthened Ni- and Co-based superalloys. <i>Materialia</i> , 2018 , 1, 211-220	3.2	5
261	Experimental and modeling study of compressive creep in 3D-woven Ni-based superalloys. <i>Acta Materialia</i> , 2018 , 155, 236-244	8.4	3
260	Microstructure and mechanical properties of a precipitation-strengthened Al-Zr-Sc-Er-Si alloy with a very small Sc content. <i>Acta Materialia</i> , 2018 , 144, 80-91	8.4	81
259	Sintering of micro-trusses created by extrusion-3D-printing of lunar regolith inks. <i>Acta Astronautica</i> , 2018 , 143, 1-8	2.9	28
258	Atom probe tomography study of Fe-Ni-Al-Cr-Ti ferritic steels with hierarchically-structured precipitates. <i>Acta Materialia</i> , 2018 , 144, 707-715	8.4	20
257	Effect of Yb microadditions on creep resistance of a dilute Al-Er-Sc-Zr alloy. <i>Materialia</i> , 2018 , 4, 65-69	3.2	15
256	NiTi-Nb micro-trusses fabricated via extrusion-based 3D-printing of powders and transient-liquid-phase sintering. <i>Acta Biomaterialia</i> , 2018 , 76, 359-370	10.8	24
255	Iron foams created by directional freeze casting of iron oxide, reduction and sintering. <i>Materials Letters</i> , 2017 , 191, 112-115	3.3	25
254	Effect of titanium additions upon microstructure and properties of precipitation-strengthened Fe-Ni-Al-Cr ferritic alloys. <i>Acta Materialia</i> , 2017 , 128, 103-112	8.4	33
253	Evolution of dealloying induced strain in nanoporous gold crystals. <i>Nanoscale</i> , 2017 , 9, 5686-5693	7.7	19
252	Rafting and elastoplastic deformation of superalloys studied by neutron diffraction. <i>Scripta Materialia</i> , 2017 , 134, 110-114	5.6	20

251	Iron Oxide Photoelectrode with Multidimensional Architecture for Highly Efficient Photoelectrochemical Water Splitting. <i>Angewandte Chemie</i> , 2017 , 129, 6683-6688	3.6	15
250	Modeling of Stresses and Strains during (De)Lithiation of NiSn-Coated Nickel Inverse-Opal Anodes. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 15433-15438	9.5	13
249	Iron Oxide Photoelectrode with Multidimensional Architecture for Highly Efficient Photoelectrochemical Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 6583-6588	16.4	53
248	Lattice strain evolution and load partitioning during creep of a Ni-based superalloy single crystal with rafted γ' microstructure. <i>Acta Materialia</i> , 2017 , 135, 77-87	8.4	29
247	Lattice parameter misfit evolution during creep of a cobalt-based superalloy single crystal with cuboidal and rafted gamma-prime microstructures. <i>Acta Materialia</i> , 2017 , 136, 118-125	8.4	31
246	Deposition-based synthesis of nickel-based superalloy microlattices. <i>Scripta Materialia</i> , 2017 , 138, 28-31	5.6	10
245	Directional solidification of aqueous TiO ₂ suspensions under reduced gravity. <i>Acta Materialia</i> , 2017 , 124, 608-619	8.4	16
244	In operando X-ray diffraction strain measurement in Ni ₃ Sn ₂ Coated inverse opal nanoscaffold anodes for Li-ion batteries. <i>Journal of Power Sources</i> , 2017 , 367, 80-89	8.9	4
243	Dislocation dynamics modeling of precipitation strengthening in FeNiAlCo ferritic superalloys. <i>Journal of Materials Research</i> , 2017 , 32, 4241-4253	2.5	8
242	Effect of machined feature size relative to the microstructural size on the superelastic performance in polycrystalline NiTi shape memory alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 706, 227-235	5.3	13
241	Multidimensional Anodized Titanium Foam Photoelectrode for Efficient Utilization of Photons in Mesoscopic Solar Cells. <i>Small</i> , 2017 , 13, 1701458	11	10
240	Effects of titanium substitutions for aluminum and tungsten in Co-10Ni-9Al-9W (at%) superalloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 705, 122-132	5.3	46
239	Ice-templated silicon foams with aligned lamellar channels. <i>MRS Communications</i> , 2017 , 7, 928-932	2.7	3
238	Effect of tungsten concentration on microstructures of Co-10Ni-6Al-(0,2,4,6)W-6Ti (at%) cobalt-based superalloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 700, 481-486	5.3	23
237	Effects of Sb micro-alloying on precipitate evolution and mechanical properties of a dilute Al-Sc-Zr alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 680, 64-74	5.3	21
236	Microstructure and compressive behavior of ice-templated copper foams with directional, lamellar pores. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 679, 435-445	5.3	33
235	Effect of vanadium micro-alloying on the microstructural evolution and creep behavior of Al-Er-Sc-Zr-Si alloys. <i>Acta Materialia</i> , 2017 , 124, 501-512	8.4	46
234	Iron and Nickel Cellular Structures by Sintering of 3D-Printed Oxide or Metallic Particle Inks. <i>Advanced Engineering Materials</i> , 2017 , 19, 1600365	3.5	54

233	Influence of ruthenium on microstructural evolution in a model CoAlW superalloy. <i>Acta Materialia</i> , 2016 , 117, 135-145	8.4	39
232	Mechanical properties and optimization of the aging of a dilute Al-Sc-Er-Zr-Si alloy with a high Zr/Sc ratio. <i>Acta Materialia</i> , 2016 , 119, 35-42	8.4	53
231	Role of silicon in the precipitation kinetics of dilute Al-Sc-Er-Zr alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 677, 485-495	5.3	45
230	3D macroporous electrode and high-performance in lithium-ion batteries using SnO ₂ coated on Cu foam. <i>Scientific Reports</i> , 2016 , 6, 18626	4.9	44
229	Porous shape-memory NiTi-Nb with microchannel arrays. <i>Acta Materialia</i> , 2016 , 115, 83-93	8.4	17
228	Synthesis, structure and mechanical properties of ice-templated tungsten foams. <i>Journal of Materials Research</i> , 2016 , 31, 753-764	2.5	27
227	Finite element analysis of mechanical stability of coarsened nanoporous gold. <i>Scripta Materialia</i> , 2016 , 115, 96-99	5.6	9
226	Morphological Study of Directionally Freeze-Cast Nickel Foams. <i>Metallurgical and Materials Transactions E</i> , 2016 , 3, 46-54		6
225	Numerical and experimental investigation of (de)lithiation-induced strains in bicontinuous silicon-coated nickel inverse opal anodes. <i>Acta Materialia</i> , 2016 , 107, 289-297	8.4	18
224	Microstructure and Creep Properties of Boron- and Zirconium-Containing Cobalt-based Superalloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 682, 260-269	5.3	39
223	Precipitate Evolution and Creep Behavior of a W-Free Co-based Superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 6090-6096	2.3	19
222	Development of a Precipitation-Strengthened Matrix for Non-quenchable Aluminum Metal Matrix Composites. <i>Jom</i> , 2016 , 68, 1915-1924	2.1	7
221	Pack Aluminization Synthesis of Superalloy 3D Woven and 3D Braided Structures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 426-438	2.3	18
220	Magnetic-field-induced bending and straining of NiMnGa single crystal beams with high aspect ratios. <i>Acta Materialia</i> , 2015 , 95, 284-290	8.4	18
219	Transient liquid-phase bonded 3D woven Ni-based superalloys. <i>Scripta Materialia</i> , 2015 , 108, 60-63	5.6	16
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