The microstructure and mechanical properties of deposited-IN718 by selective laser melting

DOI: 10.1016/j.jallcom.2011.10.107
Journal of Alloys and Compounds, 2012, 513, 518-523.

#	Paper	IF	Citations
552	Effects of processing parameters on tensile properties of selective laser melted 304 stainless steel. **2013**, 50, 581-586		237
551	High temperature material properties of IN738LC processed by selective laser melting (SLM) technology. **2013**, 19, 282-290		120
550	Microstructure and tensile behavior of hybrid nano-micro SiC reinforced iron matrix composites produced by selective laser melting. *Journal of Alloys and Compounds*, **2013**, 579, 415-421	5.7	76
549	Effect of Heat Treatment on Niobium Segregation of Laser-Cladded IN718 Alloy Coating. **2013**, 44, 708-716		53
548	Inconel 939 processed by selective laser melting: Effect of microstructure and temperature on the mechanical properties under static and cyclic loading. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 588, 188-195	5.3	151
547	Microstructure and tensile properties of laser melting deposited Ti5Al5Mo5V1Cr1Fe near β titanium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 586, 323-329	5.3	93
546	Microstructural characterization of laser melting deposited Ti-5Al-5Mo5V1Cr1Fe near β titanium alloy. *Journal of Alloys and Compounds*, **2013**, 572, 17-24	5.7	111
545	Microstructural characteristics of forged and heat treated Inconel-718 disks. **2013**, 52, 791-800		119
544	Control of shape and performance for direct laser fabrication of precision large-scale metal parts with 316L Stainless Steel. **2013**, 45, 209-216		97
543	Mechanical Behaviour and Microstructure Correlation in a Selective Laser Melted Superalloy. **2013**,		11
542	Selective laser melting additive manufacturing of TiC/Inconel 718 bulk-form nanocomposites: Densification, microstructure, and performance. **2014**, 29, 1960-1969		40
541	Additive manufacturing of nickel-based superalloy Inconel 718 by selective electron beam melting: Processing window and microstructure. **2014**, 29, 1987-1996		120
540	Microstructural Analysis on 3D Printed Nickel-Based Alloy 718. **2014**, 459-467		
539	Turbomachinery component manufacture by application of electrochemical, electro-physical and photonic processes. **2014**, 63, 703-726		215
538	Selective Laser Melting of the Inconel 718 Nickel Superalloy. **2014**, 698, 333-338		9
537	Additive Manufacturing of Al Alloys and Aluminium Matrix Composites (AMCs). **2014**,		51
536	Vacuum heat treatment of iron parts produced by selective laser melting: Microstructure, residual stress and tensile behavior. **2014**, 54, 727-733		112

535	Obtaining bimodal microstructure in laser melting deposited Ti5Al5Mo5V1Cr1Fe near β titanium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 609, 177-184	5.3	17
534	On the fatigue crack growth behavior in 316L stainless steel manufactured by selective laser melting. **2014**, 120, 15-25		370
533	Microstructure and tensile properties of iron parts fabricated by selective laser melting. **2014**, 56, 451-460		139
532	Friction Freeform Fabrication of Superalloy Inconel 718: Prospects and Problems. **2014**, 45, 182-192		14
531	Selective laser melting additive manufacturing of Inconel 718 superalloy parts: Densification, microstructure and properties. *Journal of Alloys and Compounds*, **2014**, 585, 713-721	5.7	514
530	Effect of energy input on formability, microstructure and mechanical properties of selective laser melted AZ91D magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 611, 212-222	5.3	167
529	Effect of heat treatment on microstructure and mechanical properties of laser deposited Ti60A alloy. *Journal of Alloys and Compounds*, **2014**, 585, 220-228	5.7	19
528	Effect of Process Control and Powder Quality on Inconel 718 Produced Using Electron Beam Melting. **2014**, 409-423		18
527	Thermal fatigue crack growth behaviours of laser deposited Ti60A near α+β titanium alloy. **2014**, 18, S4-933-S4-939		128
526	Review of selective laser melting: Materials and applications. **2015**, 2, 041101		1001
525	Mechanical and Microstructural Investigation of Nickel-Based Superalloy IN718 Manufactured by Selective Laser Melting (SLM). *Advanced Engineering Materials*, **2015**, 17, 1099-1105	3.5	160
524	Surface Refining by Laser Scanning on Silicon Wafers. **2015**, 833, 122-126		
523	Effect of heat treatment on the microstructure and mechanical properties of Inconel 718 processed by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 639, 647-655	5.3	375
522	Reduction of micro-cracking in nickel superalloys processed by Selective Laser Melting: A fundamental alloy design approach. **2015**, 94, 59-68		348
521	Phase analysis and microstructure characterisation of AlSi10Mg parts produced by Selective Laser Melting. **2015**, 10, 207-215		64
520	Thermal Fields Simulation of the Refining Process for Si Wafer by Continuous-Wave Laser Irradiation. **2015**, 833, 117-121		1
519	Review on Powder-Bed Laser Additive Manufacturing of Inconel 718 Parts. **2015**,		6
518	A Sensitivity Analysis Study on the Material Properties and Process Parameters for Selective Laser Melting of Inconel 625. **2015**,		6

517	Characterization of Microstructure and Mechanical Property of Inconel 718 From Selective Laser Melting. **2015**,		12
516	Reinforcing Inconel 718 Superalloy by Nano-TiC Particles in Selective Laser Melting. **2015**,		1
515	Layer thickness dependence of performance in high-power selective laser melting of 1Cr18Ni9Ti stainless steel. **2015**, 215, 142-150		123
514	Textures formed in a CoCrMo alloy by selective laser melting. *Journal of Alloys and Compounds*, **2015**, 631, 153-164	5.7	175
513	Investigation into the effect of process parameters on microstructural and physical properties of 316L stainless steel parts by selective laser melting. **2015**, 76, 869-879		362
512	Study on the microstructure, mechanical property and residual stress of SLM Inconel-718 alloy manufactured by differing island scanning strategy. **2015**, 75, 197-206		243
511	Influence of element vaporization on formability, composition, microstructure, and mechanical performance of the selective laser melted Mg□n□r components. **2015**, 156, 187-190		78
510	Electron microscopy study of direct laser deposited IN718. **2015**, 106, 324-337		56
509	Effect of standard heat treatment on the microstructure and mechanical properties of selective laser melting manufactured Inconel 718 superalloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 644, 32-40	5.3	319
508	Effect of energy input on microstructural evolution of direct laser fabricated IN718 alloy. **2015**, 106, 420-427		82
507	Surface morphology of Ti□Al□V plate fabricated by vacuum selective laser melting. **2015**, 119, 545-549		29
506	Synthesis of High-Temperature Self-lubricating Wear Resistant Composite Coating on Ti6Al4V Alloy by Laser Deposition. **2015**, 24, 1881-1889		13
505	Selective laser melting of in-situ Al4SiC4 + SiC hybrid reinforced Al matrix composites: Influence of starting SiC particle size. **2015**, 272, 15-24		109
504	Selective Laser Melting: Characteristics of IN718 Powder and Microstructures of Fabricated IN718 Sample. **2015**, 29-37		
503	Computational modeling of residual stress formation during the electron beam melting process for Inconel 718. **2015**, 7, 83-91		87
502	Microstructures of Inconel 718 by Selective Laser Melting. **2015**, 461-468		2
501	Microstructure and Mechanical Properties of Inconel 718 Produced by SLM and Subsequent Heat Treatment. **2015**, 651-653, 665-670		43
500	Differences in microstructure and properties between selective laser melting and traditional manufacturing for fabrication of metal parts: A review. **2015**, 10, 111-125		220

499	Texture, anisotropy in microstructure and mechanical properties of IN738LC alloy processed by selective laser melting (SLM). *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 620, 213-222	5.3	249
498	Microstructural characterization of Ti64 fabricated by SLM in vacuum. **2016**,		
497	Metallic materials for 3D printing. **2016**, 41, 729-741		69
496	Analysis of Selective Laser Melting Process Parameters Effect on Mechanical and Material Properties for Stainless Steel 316L. **2016**, 258, 579-582		
495	Fabrication and heat treatment of high strength Al-Cu-Mg alloy processed using selective laser melting. **2016**,		6
494	On the microstructural and mechanical properties of post-treated additively manufactured Inconel 718 superalloy under quasi-static and cyclic loading. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 669, 246-258	5.3	130
493	Selective laser melting 3D printing of Ni-based superalloy: understanding thermodynamic mechanisms. **2016**, 61, 1013-1022		71
492	Microstructure Development in Electron Beam-Melted Inconel 718 and Associated Tensile Properties. **2016**, 68, 1012-1020		69
491	Microstructure and mechanical properties of Ti□Al□V: Mill-annealed versus direct metal laser melted alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 666, 43-47	5.3	16
490	Influence of post heat treatments on anisotropy of mechanical behaviour and microstructure of Hastelloy-X parts produced by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 667, 42-53	5.3	135
489	Formation of novel graded interface and its function on mechanical properties of WC1□ reinforced Inconel 718 composites processed by selective laser melting. *Journal of Alloys and Compounds*, **2016**, 680, 333-342	5.7	63
488	Microstructure and directional fatigue behavior of Inconel 718 produced by selective laser melting. **2016**, 2, 2381-2388		53
487	Production of a sintered alloy based on the TiAl intermetallic compound: Part 2. Investigation into forming and sintering processes. **2016**, 57, 113-123		2
486	Experimental validation of finite element modeling for laser powder bed fusion deformation. **2016**, 12, 108-120		63
485	Build Height Effect on the Inconel 718 Parts Fabricated by Selective Laser Melting. **2016**, 5, 1006-1017		47
484	Superior creep strength of a nickel-based superalloy produced by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 674, 299-307	5.3	116
483	Experimental study on Ti alloy plate fabrication by vacuum selective laser melting. **2016**,		1
482	Unexpected □Phase Formation in Additive-Manufactured Ni-Based Superalloy. **2016**, 68, 950-959		46

481	Microstructural investigation of as-fabricated and heat-treated Inconel 625 and Inconel 718 fabricated by direct metal laser sintering: contribution of Politecnico di Torino and Istituto Italiano di Tecnologia (IIT) di Torino. **2016**, 71, 273-278		23
480	Effects of cooling condition on microstructure and mechanical properties in laser rapid forming of 34CrNiMo6 thin-wall component. **2016**, 82, 1269-1279		18
479	Study of the effect of heat treatment on the structure and properties of the specimens obtained by the method of direct metal deposition. **2016**, 86, 2567-2574		21
478	Investigation of the microstructure and surface morphology of a Ti6Al4V plate fabricated by vacuum selective laser melting. **2016**, 122, 1		24
477	Microstructure and performance optimisation of stainless steel formed by laser additive manufacturing. **2016**, 32, 1223-1230		25
476	Sensitivity analysis of material and process parameters in finite element modeling of selective laser melting of Inconel 625. **2016**, 86, 2653-2666		53
475	Functionally graded material of 304L stainless steel and inconel 625 fabricated by directed energy deposition: Characterization and thermodynamic modeling. **2016**, 108, 46-54		266
474	Epitaxy and Microstructure Evolution in Metal Additive Manufacturing. **2016**, 46, 125-149		164
473	The metallurgy and processing science of metal additive manufacturing. **2016**, 61, 315-360		1185
472	Long fatigue crack growth in Inconel 718 produced by selective laser melting. *International Journal of Fatigue*, **2016**, 92, 499-506	5	78
471	Tailoring the texture of IN738LC processed by selective laser melting (SLM) by specific scanning strategies. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 661, 240-246	5.3	156
470	Selective laser melting of high strength AlCuMg alloys: Processing, microstructure and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 656, 47-54	5.3	272
469	Hybrid additive and subtractive machine tools Research and industrial developments. *International Journal of Machine Tools and Manufacture*, **2016**, 101, 79-101	9.4	225
468	Synthesis and characterization of Ni60-hBN high temperature self-lubricating anti-wear composite coatings on Ti6Al4V alloy by laser cladding. **2016**, 78, 87-94		73
467	Review on powder-bed laser additive manufacturing of Inconel 718 parts. **2017**, 231, 1890-1903		112
466	Influences of energy density on microstructure and consolidation of selective laser melted bismuth telluride thermoelectric powder. **2017**, 25, 411-417		34
465	Nanoindentation and wear properties of Ti and Ti-TiB composite materials produced by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 688, 20-26	5.3	184
464	Densification and microstructural investigation of Inconel 718 parts fabricated by selective laser melting. **2017**, 310, 60-66		141

463	Powder bed binder jet 3D printing of Inconel 718: Densification, microstructural evolution and challenges?. **2017**, 21, 207-218		114
462	Microstructure and hardness studies of Inconel 718 manufactured by selective laser melting before and after solution heat treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 689, 220-232	5.3	281
461	Influence of energy density on metallurgy and properties in metal additive manufacturing. **2017**, 33, 1269-1289		75
460	Effect of heat treatment and hot isostatic pressing on the microstructure and mechanical properties of Inconel 625 alloy processed by laser powder bed fusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 689, 1-10	5.3	140
459	Melt pool simulation for the evaluation of process parameters in selective laser melting. **2017**, 14, 116-125		79
458	The Effect of Layer Thickness at Selective Laser Melting. **2017**, 174, 126-134		95
457	Microstructure and mechanical property of selective laser melted Ti6Al4V dependence on laser energy density. **2017**, 23, 217-226		70
456	Effect of crystallographic orientation on mechanical anisotropy of selective laser melted Ti-6Al-4V alloy. **2017**, 127, 137-145		84
455	Effect on beam profile of Ti alloy plate fabrication from powder by sputter-less selective laser melting. **2017**,		1
454	Microstructure of nickel-base superalloy MAR-M247 additively manufactured through scanning laser epitaxy (SLE). *Journal of Alloys and Compounds*, **2017**, 705, 806-816	5.7	48
453	Modification of wetting property of Inconel 718 surface by nanosecond laser texturing. **2017**, 414, 313-324		70
452	Comparison on mechanical anisotropies of selective laser melted Ti-6Al-4V alloy and 304 stainless steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 695, 92-100	5.3	74
451	Microstructures and mechanical properties of Ti6Al4V alloy fabricated by multi-laser beam selective laser melting. **2017**, 199, 79-83		43
450	Correlation of the High Power SLM Process with Resulting Material Properties for IN718. **2017**, 162, 179-187		10
449	Additive Manufacturing of Metals: The Technology, Materials, Design and Production. **2017**,		42
448	Hot isostatic pressing of IN718 components manufactured by selective laser melting. **2017**, 13, 93-102		155
447	Electron Backscatter Diffraction Analysis of Inconel 718 Parts Fabricated by Selective Laser Melting Additive Manufacturing. **2017**, 69, 402-408		32
446	Electrochemical Removal of Different Phases from Laser Solid Formed Inconel 718. **2017**, 164, E151-E157		23

445	Impact of heat treatment on mechanical behaviour of Inconel 718 processed with tailored microstructure by selective laser melting. **2017**, 131, 12-22		169
444	Microstructures and mechanical behavior of Inconel 625 fabricated by solid-state additive manufacturing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 694, 1-9	5.3	84
443	Laser powder bed fusion of nickel alloy 625: Experimental investigations of effects of process parameters on melt pool size and shape with spatter analysis. *International Journal of Machine Tools and Manufacture*, **2017**, 121, 22-36	9.4	132
442	Powder characterisation techniques and effects of powder characteristics on part properties in powder-bed fusion processes. **2017**, 12, 3-29		170
441	A comparison on metallurgical behaviors of 316L stainless steel by selective laser melting and laser cladding deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 685, 265-273	5.3	187
440	Thermo-mechanical improvement of Inconel 718 using ex situ boron nitride-reinforced composites processed by laser powder bed fusion. **2017**, 7, 14359		20
439	An overview of powder granulometry on feedstock and part performance in the selective laser melting process. **2017**, 18, 228-255		151
438	Analysis of powder steel material, laser sintering technology and machining on surface parameters and fatigue. **2017**, 48, 820-830		0
437	Microstructure evolution characteristics of Inconel 625 alloy from selective laser melting to heat treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 705, 20-31	5.3	112
436	Effects of thermal cycles on the microstructure evolution of Inconel 718 during selective laser melting process. **2017**, 18, 1-14		56
435	Improvement in the oxidation resistance of Nb-Si based alloy by selective laser melting. **2017**, 127, 260-269		32
434	Microstructures and mechanical properties in powder-based additive manufacturing of a nickel-based alloy. **2017**, 58, 269-275		2
433	Wear and corrosion behaviour of Inconel 718 laser surface alloyed with rhenium. **2017**, 132, 349-359		35
432	Residual Stress Enhancement in 3D Printed Inconel 718 Superalloy Treated by Ultrasonic Nano-Crystal Surface Modification. **2017**,		2
431	Introduction to 3D Printing or Additive Manufacturing. **2017**, 1-29		3
430	Thermal expansion coefficients in Invar processed by selective laser melting. **2017**, 52, 10517-10525		33
429	Anisotropic tensile behavior of in situ precipitation strengthened Inconel 718 fabricated by additive manufacturing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 701, 344-351	5.3	166
428	Effect of different heat treatments on the microstructure and mechanical properties in selective laser melted INCONEL 718 alloy. **2017**, 32, 1588-1595		94

427	Predictive modeling and optimization of multi-track processing for laser powder bed fusion of nickel alloy 625. **2017**, 13, 14-36		36
426	Mechanical behavior of post-processed Inconel 718 manufactured through the electron beam melting process. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 680, 338-346	5.3	70
425	Microstructure and strength analysis of eutectic Al-Si alloy in-situ manufactured using selective laser melting from elemental powder mixture. *Journal of Alloys and Compounds*, **2017**, 691, 316-322	5.7	81
424	Influence of scan strategy and process parameters on microstructure and its optimization in additively manufactured nickel alloy 625 via laser powder bed fusion. **2017**, 90, 1393-1417		78
423	Powder bed fusion processes. **2017**, 55-77		34
422	Effect of the selective laser melting parameters on the structure□phase state of a ZhS6K-VI nickel superalloy. **2017**, 2017, 594-600		4
421	A novel test method for the fatigue characterization of metal powder bed fused alloys. **2017**, 7, 67-74		7
420	Electrochemical Machining Properties of the Laser Rapid Formed Inconel 718 Alloy in NaNO3Solution. **2017**, 164, E548-E559		21
419	Experimental analysis on melting and solidification process of titanium with synchrotron x ray for development of sputter-less SLM. **2017**,		
418	Selective Laser Melting of Hot Gas Turbine Components: Materials, Design and Manufacturing Aspects. **2017**, 219, 012022		3
417	Manufacturing Feasibility and Forming Properties of Cu-4Sn in Selective Laser Melting. **2017**, 10,		33
416	Microstructure Evolution and Biodegradation Behavior of Laser Rapid Solidified Mg□Al□Zn Alloy. **2017**, 7, 105		21
415	Structure, Texture and Phases in 3D Printed IN718 Alloy Subjected to Homogenization and HIP Treatments. **2017**, 7, 196		135
414	On the fatigue strength enhancement of additive manufactured AlSi10Mg parts by mechanical and thermal post-processing. **2018**, 145, 28-41		129
413	Influence of process parameters and heat treatments on the microstructures and dynamic mechanical behaviors of Inconel 718 superalloy manufactured by laser metal deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 721, 215-225	5.3	47
412	Microstructure evolution, mechanical response and underlying thermodynamic mechanism of multi-phase strengthening WC/Inconel 718 composites using selective laser melting. *Journal of Alloys and Compounds*, **2018**, 747, 684-695	5.7	23
411	Preheat effect on titanium plate fabricated by sputter-free selective laser melting in vacuum. **2018**, 124, 1		13
410	Machining characteristics of 18Ni-300 steel in additive/subtractive hybrid manufacturing. **2018**, 95, 2509-2519		37

409	Microstructures and Mechanical Properties of Inconel 718 Alloy at Ultralow Temperatures. **2018**, 27, 2060-2069		3
408	Thermofluid field of molten pool and its effects during selective laser melting (SLM) of Inconel 718 alloy. **2018**, 21, 567-578		44
407	Recent advances in the development of aerospace materials. **2018**, 97, 22-34		286
406	A Review of Metal Fabricated with Laser- and Powder-Bed Based Additive Manufacturing Techniques: Process, Nomenclature, Materials, Achievable Properties, and its Utilization in the Medical Sector. *Advanced Engineering Materials*, **2018**, 20, 1700658	3.5	102
405	Characterization of texture and grain boundary character distributions of selective laser melted Inconel 625 alloy. **2018**, 143, 182-190		42
404	Tensile behavior in selective laser melting. **2018**, 96, 1187-1194		5
403	Modelling of anisotropic elastic properties in alloy 718 built by electron beam melting. **2018**, 34, 529-537		21
402	Metal Alloys for Fusion-Based Additive Manufacturing. *Advanced Engineering Materials*, **2018**, 20, 1700952	3.5	80
401	Influence of laser exposure time and point distance on 75-µm-thick layer of selective laser melted Alloy 718. **2018**, 94, 2199-2207		35
400	Correlation of mechanical properties to microstructure in Inconel 718 fabricated by Direct Metal Laser Sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 712, 539-547	5.3	42
399	Investigations of □, □ and □ precipitates in heat-treated Inconel 718 alloy fabricated by selective laser melting. **2018**, 136, 398-406		106
398	Electrochemical behavior of Inconel 718 fabricated by laser solid forming on different sections. **2018**, 132, 79-89		43
397	Role of heat treatment and build orientation in the microstructure sensitive deformation characteristics of IN718 produced via SLM additive manufacturing. **2018**, 22, 479-496		41
396	Ultrasonic Vibration-Assisted Laser Engineered Net Shaping of Inconel 718 Parts: Microstructural and Mechanical Characterization. **2018**, 140,		25
395	Damage reconstruction from tri-dexel data for laser-aided repairing of metallic components. **2018**, 96, 3377-3390		16
394	Characterization of wire arc additive manufacturing 2Cr13 part: Process stability, microstructural evolution, and tensile properties. *Journal of Alloys and Compounds*, **2018**, 748, 911-921	5.7	46
393	Comparison of microstructures and mechanical properties of Inconel 718 alloy processed by selective laser melting and casting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 724, 357-367	5.3	96
392	Prediction of microstructure in selective laser melted Ti 6Al 4V alloy by cellular automaton. *Journal of Alloys and Compounds*, **2018**, 748, 281-290	5.7	42

391	Effect of heat treatment on microstructure and mechanical properties of the selective laser melting processed Ti-5Al-2.5Sn titanium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 709, 301-311	5.3	37
390	Additive manufacturing of metallic components Process, structure and properties. **2018**, 92, 112-224		2682
389	Hot cracking mechanism affecting a non-weldable Ni-based superalloy produced by selective electron Beam Melting. **2018**, 142, 82-94		210
388	Study of the Evolution of Distortion During the Powder Bed Fusion Build Process Using a Combined Experimental and Modeling Approach ? ?Reprinted from Additive Manufacturing, Vol 12, Dunbar, Alexander J and Denlinger, Erik R and Gouge, Michael F and Michaleris, Pan, Experimental validation of finite element modeling for laser powder bed fusion deformation, Pages No. 108[illegible]20,		
387	Additive Manufacturing of Advanced Multi-Component Alloys: Bulk Metallic Glasses and High Entropy Alloys. *Advanced Engineering Materials*, **2018**, 20, 1700874	3.5	55
386	Density determination and simulation of Inconel 718 alloy at normal and metastable liquid states. **2018**, 34, 436-439		33
385	Influence of solution heat treatment on microstructure and tensile properties of Inconel 718 formed by high-deposition-rate laser metal deposition. *Journal of Alloys and Compounds*, **2018**, 740, 389-399	5.7	37
384	Anisotropy and heterogeneity of microstructure and mechanical properties in metal additive manufacturing: A critical review. **2018**, 139, 565-586		548
383	Porosity of products from electroerosive cobalt-chromum powders, obtained by additive technologies. **2018**, 224, 01125		1
382	Manufacture of Cobalt Chromium Powders by the Electric Discharge Dispersion of Wastes and Their Investigation. **2018**, 2018, 1177-1180		5
381	Element composition of additive products from electroerozive cobalt-chromum powders. **2018**, 224, 01124		1
380	Hardness of products from electroerosive cobalt-chrome powders, obtained by additive technologies. **2018**, 441, 012004		
379	Mechanical and tribological behaviors of graphene/Inconel 718 composites. **2018**, 28, 1958-1969		28
378	Mechanical Properties of SLM-Titanium Materials for Biomedical Applications: A Review. **2018**, 5, 17906-17913		17
377	Laser Polishing of Additive Manufactured Superalloy. **2018**, 71, 150-154		54
376	Cooling rate effect on tensile strength of laser deposited Inconel 718. **2018**, 26, 912-919		12
375	X-Ray Structural Analysis of Sintered Samples from Electroerozive Cobaltchrome Powders. **2018**, 327, 032005		
374	Research of mechanical properties of the sintered samples from electro-erosion cobalt-chromium powder. **2018**, 7, 28		

373	The Effect of Rhenium Addition on Microstructure and Corrosion Resistance of Inconel 718 Processed by Selective Laser Melting. **2018**, 49, 6479-6489		5
372	Effect of manufacturing parameters on the microstructure and mechanical properties of metal laser sintering parts of precipitate hardenable metals. **2018**, 99, 2491-2507		21
371	Experimental Investigation on Tool Wear During the Milling Processes for the Post-Processing of Selective Laser Melted Inconel 718 Alloys. **2018**,		2
370	A review of slicing methods for directed energy deposition based additive manufacturing. **2018**, 24, 1012-1025		29
369	The Hardness of Additively Manufactured Alloys. **2018**, 11,		56
368	Dependence of Nickel Superalloy Structural Defects on Selective Laser Fusion Process Parameters1. **2018**, 60, 373-380		0
367	Effect of post processing on the creep performance of laser powder bed fused Inconel 718. **2018**, 24, 486-497		24
366	Solution Treatment Study of Inconel 718 Produced by SLM Additive Technique in View of the Oxidation Resistance. *Advanced Engineering Materials*, **2018**, 20, 1800351	3.5	26
365	Horizontal dimensional accuracy prediction of selective laser melting. **2018**, 160, 9-20		44
364	Frontiers of Additively Manufactured Metallic Materials. **2018**, 11,		20
363	Increase in Strength and Fretting Resistance of Alloy 718 Using the Surface Modification Process. **2018**, 11,		12
362	The Role of Reinforcing Particle Size in Tailoring Interfacial Microstructure and Wear Performance of Selective Laser Melting WC/Inconel 718 Composites. **2018**, 140,		14
361	Selective laser melting of 24CrNiMo steel for brake disc: Fabrication efficiency, microstructure evolution, and properties. **2018**, 107, 99-109		47
360	Effects of Post-processing on Microstructure and Mechanical Properties of SLM-Processed IN-718. **2018**, 515-526		4
359	Impact of Powder Variability on the Microstructure and Mechanical Behavior of Selective Laser Melted Alloy 718. **2018**, 89-113		7
358	Progress in the Processing and Understanding of Alloy 718 Fabricated Through Powder Bed Additive Manufacturing Processes. **2018**, 69-88		3
357	Early detection of fracture failure in SLM AM tension testing with Talbot-Lau neutron interferometry. **2018**, 22, 658-664		6
356	Inconel 625 lattice structures manufactured by selective laser melting (SLM): Mechanical properties, deformation and failure modes. **2018**, 157, 179-199		147

355	The printability, microstructure, crystallographic features and microhardness of selective laser melted Inconel 718 thin wall. **2018**, 156, 407-418		43
354	Microstructural and Microhardness Evolution from Homogenization and Hot Isostatic Pressing on Selective Laser Melted Inconel 718: Structure, Texture, and Phases. **2018**, 2, 30		23
353	Study of irradiation induced surface pattern and structural changes in Inconel 718 alloy. **2018**, 5, 056503		3
352	Study of the Microstructure and Cracking Mechanisms of Hastelloy X Produced by Laser Powder Bed Fusion. **2018**, 11,		82
351	Effects of Selective Laser Melting additive manufacturing parameters of Inconel 718 on porosity, microstructure and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 735, 182-190	5.3	142
350	Comparative study of IN600 superalloy produced by two powder metallurgy technologies: Argon Atomizing and Plasma Rotating Electrode Process. **2018**, 156, 302-309		19
349	The utilization of selective laser melting technology on heat transfer devices for thermal energy conversion applications: A review. **2018**, 91, 420-442		113
348	Effect of heat treatment on microstructure evolution of Inconel 718 alloy fabricated by selective laser melting. *Journal of Alloys and Compounds*, **2018**, 764, 639-649	5.7	92
347	Microstructures and stress rupture properties of pulse laser repaired Inconel 718 superalloy after different heat treatments. *Journal of Alloys and Compounds*, **2019**, 770, 125-135	5.7	38
346	Hydrogen-assisted failure of laser melting additive manufactured IN718 superalloy. **2019**, 160, 108171		4
345	Investigation on the microstructure and corrosion properties of Inconel 625 alloy fabricated by wire arc additive manufacturing. **2019**, 6, 106568		8
344	Study on the microstructure and creep behavior of Inconel 718 superalloy fabricated by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 765, 138282	5.3	26
343	Tensile Deformation and Fracture Behaviors of a Nickel-Based Superalloy via In Situ Digital Image Correlation and Synchrotron Radiation X-ray Tomography. **2019**, 12,		3
342	Selective laser melting of the hard-to-weld IN738LC superalloy: Efforts to mitigate defects and the resultant microstructural and mechanical properties. *Journal of Alloys and Compounds*, **2019**, 807, 151662	5.7	28
341	Mitigation of scan strategy effects and material anisotropy through supersolvus annealing in LPBF IN718. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 764, 138230	5.3	22
340	Effect of Layer-Wise Varying Parameters on the Microstructure and Soundness of Selective Laser Melted INCONEL 718 Alloy. **2019**, 12,		5
339	Vacuum brazing of the ultrathin-walled structure using particulate-reinforced composite filler metal: Microstructural evolution and mechanical properties. *Journal of Alloys and Compounds*, **2019**, 805, 638-647	5.7	7
338	Hot corrosion behaviour of wire-arc additive manufactured Ni-based superalloy ATI 718Plus . **2019** , 158, 108086		20

337	Smooth and notch fatigue behavior of selectively laser melted Inconel 718 with as-built surfaces. *International Journal of Fatigue*, **2019**, 128, 105211	5	19
336	Study of Formed Oxides in IN718 Alloy during the Fabrication by Selective Laser Melting and Electron Beam Melting. **2019**, 9, 19		17
335	Effect of post-treatments on microstructure and mechanical properties of a novel nickel-based powder metallurgy superalloy processed by selective laser melting. **2019**, 6, 1065e5		4
334	Wire + Arc Additively Manufactured Inconel 718: Effect of post-deposition heat treatments on microstructure and tensile properties. **2019**, 183, 108157		48
333	Effect of Heat Treatment on Microstructure Evolution and Mechanical Properties of Selective Laser Melted Inconel 718 Alloy. **2019**, 28, 5376-5386		5
332	Electrochemical polishing of selective laser melted Inconel 718. **2019**, 34, 239-246		21
331	Effects of different heat treatments on the cyclic material behavior of additively manufactured Inconel 718. **2019**, 18, 586-593		0
330	A review of mechanical properties of additively manufactured Inconel 718. **2019**, 30, 100877		111
329	High-temperature mechanical properties of alloy 718 produced by laser powder bed fusion with different processing parameters. **2019**, 26, 147-160		23
328	Study on the Fabrication of Super-Hydrophobic Surface on Inconel Alloy via Nanosecond Laser Ablation. **2019**, 12,		25
327	High-throughput fabrication of nickel-based alloys with different Nb contents via a dual-feed additive manufacturing system: Effect of Nb content on microstructural and mechanical properties. *Journal of Alloys and Compounds*, **2019**, 785, 826-837	5.7	36
326	On the solidification behaviour and cracking origin of a nickel-based superalloy during selective laser melting. **2019**, 148, 330-344		72
325	Effect of laser energy density on the microstructure, mechanical properties, and deformation of Inconel 718 samples fabricated by selective laser melting. *Journal of Alloys and Compounds*, **2019**, 786, 481-488	5.7	58
324	Mechanisms driving high-cycle fatigue life of as-built Inconel 718 processed by laser powder bed fusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 761, 137993	5.3	29
323	Texture and Microstructural Features at Different Length Scales in Inconel 718 Produced by Selective Laser Melting. **2019**, 12,		34
322	Microstructure and mechanical properties of Inconel 625 fabricated by wire-arc additive manufacturing. **2019**, 374, 116-123		75
321	Rolling contact fatigue crack propagation relative to anisotropies in additive manufactured Inconel 625. **2019**, 426-427, 1837-1845		5
320	Mechanical Fatigue of Metals. **2019**,		6

319	Fatigue Properties of Powder Bed Fused Inconel 718 in As-Built Surface Condition. **2019**, 91-97		3
318	A systematic investigation of the effects of process parameters on heat and fluid flow and metallurgical conditions during laser-based powder bed fusion of Ti6Al4V alloy. **2019**, 139, 213-230		35
317	Laser Additive Manufacturing using directed energy deposition of Inconel-718 wall structures with tailored characteristics. **2019**, 166, 270-278		45
316	Effect of process parameters on morphology, sectional characteristics and crack sensitivity of Ti-40Al-9V-0.5Y alloy single tracks produced by selective laser melting. **2019**, 2, 355-361		7
315	Thermomechanical behavior of laser metal deposited Inconel 718 superalloy over a wide range of temperature and strain rate: Testing and constitutive modeling. **2019**, 135, 13-25		18
314	Effect of scanning strategy and speed on the microstructure and mechanical properties of selective laser melted IN718 nickel-based superalloy. **2019**, 103, 1769-1780		19
313	The Use of Selective Laser Melting as a Method of New Materials Development. **2019**, 403-410		2
312	Powder-bed additive manufacturing for aerospace application: Techniques, metallic and metal/ceramic composite materials and trends. **2019**, 6, 5		24
311	Microstructural Evolution of Post-Processed Hastelloy X Alloy Fabricated by Laser Powder Bed Fusion. **2019**, 12,		26
310	Microstructure and corrosion properties of sensitized laser powder bed fusion printed Inconel 718 to dissolve support structures in a self-terminating manner. **2019**, 27, 526-532		18
309	Varied heat treatments and properties of laser powder bed printed Inconel 718. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 755, 170-180	5.3	44
308	Experimentally validated predictions of thermal history and microhardness in laser-deposited Inconel 718 on carbon steel. **2019**, 27, 540-551		40
307	Study of the Dynamic Recrystallization Process of the Inconel625 Alloy at a High Strain Rate. **2019**, 12,		11
306	Heat treatment of Inconel 718 produced by selective laser melting: Microstructure and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 750, 98-107	5.3	80
305	Influence of Heat Treatment on Microstructure and Mechanical Properties of Ni-Fe-Co Ternary Alloy Prepared via Spark Plasma Sintering. **2019**, 655, 012030		2
304	Density and volumetric expansion of the Inconel 718 alloy in solid and liquid states. **2019**, 26, 785-788		3
303	The effects of stress relieving heat treatment on the microstructure and residual stress of Inconel 718 fabricated by laser metal powder bed fusion additive manufacturing process. **2019**, 48, 154-163		23
302	Investigation on the Precipitates of IN718 Alloy Fabricated by Selective Laser Melting. **2019**, 9, 1128		14

301	SLM-built titanium materials: great potential of developing microstructure and properties for biomedical applications: a review. **2019**, 6, 122006		6
300	A review of selective laser melting of aluminum alloys: Processing, microstructure, property and developing trends. **2019**, 35, 270-284		400
299	Progress in additive manufacturing on new materials: A review. **2019**, 35, 242-269		283
298	Effect of structural support on microstructure of nickel base superalloy fabricated by laser-powder bed fusion additive manufacturing. **2019**, 26, 30-40		12
297	Numerical study on the effective stiffness of topology-optimized lattice structures made of orthotropic crystal grains with optimal orientation. **2019**, 159, 202-209		3
296	Fragmentation and refinement behavior and underlying thermodynamic mechanism of WC reinforcement during selective laser melting of Ni-based composites. *Journal of Alloys and Compounds*, **2019**, 777, 693-702	5.7	21
295	Preparation and properties of Co□r alloy denture by selective laser melting. **2019**, 6, 026552		3
294	Additive manufacturing technology empowered complex electromechanical energy conversion devices and transformers. **2019**, 14, 35-50		18
293	Experimental and Taguchi-Based Grey Approach of Laser Metal Deposition Technique on Nickel-Based Superalloy. **2019**, 72, 205-214		29
292	Stress state-dependent mechanics of additively manufactured 304L stainless steel: Part 2 □ Characterization and modeling of macroscopic plasticity behavior. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 743, 824-831	5.3	8
291	Comparative investigation of small punch creep resistance of Inconel 718 fabricated by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 745, 31-38	5.3	28
290	Laser additive manufacturing of FeCrCoMnNi high-entropy alloy: Effect of heat treatment on microstructure, residual stress and mechanical property. *Journal of Alloys and Compounds*, **2019**, 785, 1144-1159	5.7	107
289	Multiscale characterization of microstructures and mechanical properties of Inconel 718 fabricated by selective laser melting. *Journal of Alloys and Compounds*, **2019**, 784, 182-194	5.7	44
288	Influence of the focus offset on the defects, microstructure, and mechanical properties of an Inconel 718 superalloy fabricated by electron beam additive manufacturing. *Journal of Alloys and Compounds*, **2019**, 781, 842-856	5.7	23
287	Microstructure and Properties of 3D Printed Inconel 718 Joint Brazed with BNi-2 Amorphous Filler Metal. **2019**, 22,		3
286	Microstructural evolution and mechanical properties of IN718 alloy fabricated by selective laser melting following different heat treatments. *Journal of Alloys and Compounds*, **2019**, 772, 861-870	5.7	78
285	Densification behavior, microstructure evolution, and mechanical performances of selective laser melted Ti-5Al-2.5Sn □itanium alloy: Effect of laser energy input. *Journal of Alloys and Compounds*, **2019**, 774, 1024-1035	5.7	14
284	Effect of Heat Treatment on Microstructure and Properties of FGH4096M Superalloy Processed by Selective Laser Melting. **2020**, 26, 1270-1285		5

283	Characterization of laser spatter and condensate generated during the selective laser melting of 304L stainless steel powder. **2020**, 31, 100904		15
282	Microstructure and elevated temperature mechanical properties of IN718 alloy fabricated by laser metal deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 771, 138580	5.3	23
281	Microstructural evolution and mechanical properties of Inconel 718 superalloy thin wall fabricated by pulsed plasma arc additive manufacturing. *Journal of Alloys and Compounds*, **2020**, 819, 152936	5.7	22
280	A Review on Laser Powder Bed Fusion of Inconel 625 Nickel-Based Alloy. **2020**, 10, 81		56
279	An ultra-high strength martensitic steel fabricated using selective laser melting additive manufacturing: Densification, microstructure, and mechanical properties. **2020**, 186, 199-214		73
278	Unidirectional columnar microstructure and its effect on the enhanced creep resistance of selective electron beam melted Inconel 718. *Journal of Alloys and Compounds*, **2020**, 817, 153320	5.7	11
277	The microstructure evolution and tensile properties of Inconel 718 fabricated by high-deposition-rate laser directed energy deposition. **2020**, 31, 100941		15
276	Microstructure and tensile property of a precipitation strengthened high entropy alloy processed by selective laser melting and post heat treatment. **2020**, 36, 101601		8
275	Toward a better understanding of phase transformations in additive manufacturing of Alloy 718. **2020**, 13, 100862		21
274	Efficient prediction of cracking at solid-lattice support interface during laser powder bed fusion via global-local J-integral analysis based on modified inherent strain method and lattice support homogenization. **2020**, 36, 101590		2
273	Crystallographic texture and velocities of ultrasonic waves in a Ni-based superalloy manufactured by laser powder bed fusion. **2020**, 169, 110607		4
272	Effects of Homogenization Heat Treatment on Mechanical Properties of Inconel 718 Sandwich Structures Manufactured by Selective Laser Melting. **2020**, 10, 645		7
271	The effect of subsequent heat treatment on the evolution behavior of second phase particles and mechanical properties of the Inconel 718 superalloy manufactured by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2020**, 794, 139931	5.3	18
270	Functionally Nb graded inconel 718 alloys fabricated by laser melting deposition: mechanical properties and corrosion behavior. **2020**, 67, 16-23		5
269	The Effect of Recrystallization on Creep Properties of Alloy IN939 Fabricated by Selective Laser Melting Process. **2020**, 10, 1016		9
268	The wear resistance additive products derived from EED cobalt powder. **2020**, 795, 012006		
267	Role of the chemical homogenization on the microstructural and mechanical evolution of prolonged heat-treated laser powder bed fused Inconel 625. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 796, 140007	5.3	8
266	Fatigue assessment of as-built and heat-treated Inconel 718 specimens produced by additive manufacturing including notch effects. **2020**, 43, 2326-2336		18

265	Microanalysis of Additive Products from Electro-Erosion Cobalt-Chrome Powders. **2020**, 299, 508-512		
264	The Phase Composition of Products from Electro-Erosive Cobalto-Chrome Powders, Obtained by Additive Technologies. **2020**, 299, 611-616		0
263	Microstructure and mechanical properties of Inconel-625 slab component fabricated by wire arc additive manufacturing. **2020**, 36, 1785-1795		5
262	Characterization of IN718 recycling powder and its effect on LPBF manufactured parts. **2020**, 94, 227-232		5
261	Study on the Effect of Powder-Bed Fusion Process Parameters on the Quality of as-Built IN718 Parts Using Response Surface Methodology. **2020**, 10, 1180		6
260	Microstructural characterization of laser surface-melted Inconel 718. **2020**, 49, 494-509		1
259	Effect of the Volume Energy Density and Heat Treatment on the Defect, Microstructure, and Hardness of L-PBF Inconel 625. **2020**, 51, 5880-5891		8
258	A critical review of corrosion characteristics of additively manufactured stainless steels. **2020**, 1-37		7
257	Corrosion Study of Selective Laser Melted IN718 Alloy upon Post Heat Treatment and Shot Peening. **2020**, 10, 1562		10
256	A Critical Review of the Material Characteristics of Additive Manufactured IN718 for High-Temperature Application. **2020**, 10, 1576		12
255	Inclusion-induced fatigue crack initiation in powder bed fusion of Alloy 718. **2020**, 36, 101670		3
254	Characteristics of Metal Specimens Formed by Selective Laser Melting: A State-of-the-Art Review. **2020**, 30, 7073		3
253	Obtaining and Research of Additive Products from Electroerosive Cobalt-Chrome Powders. **2020**, 795, 012007		
252	Effect of heat treatment on microstructural evolution and hardness homogeneity in laser powder bed fusion of alloy 718. **2020**, 35, 101282		3
251	Fatigue short crack propagation behavior of selective laser melted Inconel 718 alloy by in-situ SEM study: Influence of orientation and temperature. *International Journal of Fatigue*, **2020**, 139, 105739	5	14
250	Hot Corrosion and Mechanical Performance of Repaired Inconel 718 Components via Laser Additive Manufacturing. **2020**, 13,		5
249	Microstructure of a Ti50 wt% Ta alloy produced via laser powder bed fusion. **2020**, 33, 981-990		8
248	High temperature dry sliding wear behaviour of laser powder bed fused Inconel 718. **2020**, 34, 101279		4

247	On selective laser melting of Inconel 718: Densification, surface roughness, and residual stresses. **2020**, 193, 108818		53
246	Investigations on the fracture behavior of Inconel 718 superalloys obtained from cast and additive manufacturing processes. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 790, 139666	5.3	14
245	Microstructural heterogeneity and mechanical anisotropy of 18Ni-330 maraging steel fabricated by selective laser melting: The effect of build orientation and height. **2020**, 35, 2065-2076		12
244	A perspective on the current and future roles of additive manufacturing in process engineering, with an emphasis on heat transfer. **2020**, 19, 100594		18
243	The effect of laser power on the microstructure and wear performance of IN718 superalloy fabricated by laser additive manufacturing. **2020**, 108, 2245-2254		5
242	Droplet spreading and wettability of laser textured C-263 based nickel superalloy. **2020**, 397, 126055		1
241	Spatter behavior for 316L stainless steel fabricated by selective laser melting in a vacuum. **2020**, 134, 106209		5
240	A review on microstructures and properties of high entropy alloys manufactured by selective laser melting. **2020**, 2, 032003		24
239	Quantification of porosity and microstructure and their effect on quasi-static and dynamic behavior of additively manufactured Inconel 718. **2020**, 34, 101380		9
238	Microstructures and Nb-Rich Precipitation Behaviors of Inconel 718 Superalloy Under Sub-rapid Solidification Process. **2020**, 51, 2306-2317		8
237	Effect of defects and specimen size with rectangular cross-section on the tensile properties of additively manufactured components. **2020**, 15, 251-264		13
236	The effect of energy density on texture and mechanical anisotropy in selective laser melted Inconel 718. **2020**, 191, 108642		43
235	Competing crack initiation behaviors of a laser additively manufactured nickel-based superalloy in high and very high cycle fatigue regimes. *International Journal of Fatigue*, **2020**, 136, 105580	5	41
234	Electron Beam Welding of Inconel 718. **2020**, 48, 428-435		10
233	A comparative analysis of Inconel 718 made by additive manufacturing and suction casting: Microstructure evolution in homogenization. **2020**, 36, 101404		8
232	Composition and Properties of the Powder Fabricated from the Waste of High-Speed R18 Tool Steel by Electroerosion Dispersion. **2020**, 2020, 698-701		
231	A Study of Porosity of Products Sintered from BrS30 Alloy Electro-Erosion Powders. **2020**, 989, 187-191		
230	Obtaining and Research of Additive Products from Electro-Erosive Cobalt-Chrome Powders. **2020**, 989, 801-805		

229	Effects of laser-energy density and build orientation on the structure-property relationships in as-built Inconel 718 manufactured by laser powder bed fusion. **2020**, 36, 101425-101425		11
228	Microstructural and mechanical anisotropy of selective laser melted IN718 superalloy at room and high temperatures using small punch test. **2020**, 162, 110200		21
227	Effects of circular beam oscillation technique on formability and solidification behaviour of selective laser melted Inconel 718: From single tracks to cuboid samples. **2020**, 51, 137-150		16
226	Dynamic-loading behavior and anisotropic deformation of pre- and post-heat-treated IN718 fabricated by laser powder bed fusion. **2020**, 33, 101083		2
225	Thermodynamics analysis and rapid solidification of laser polished Inconel 718 by selective laser melting. **2020**, 511, 145423		24
224	Research progress on selective laser melting (SLM) of magnesium alloys: A review. **2020**, 207, 163842		36
223	Effect of Microstructures and Defects on Dynamic Compression and Shear Performance of Laser Metal□Deposited GH4169 Superalloy. **2020**, 33, 04020008		2
222	Effect of in-situ heat treatment and process parameters on the laser-deposited IN718 microstructure and mechanical properties. **2020**, 5, 1245-1257		0
221	A state-of-the-art review on energy consumption and quality characteristics in metal additive manufacturing processes. **2020**, 42, 1		7
220	Tailored microstructures and strengthening mechanisms in an additively manufactured dual-phase high-entropy alloy via selective laser melting. **2020**, 63, 1279-1290		17
219	Development of processing strategies for multigraded selective laser melting of Ti6Al4V and IN718. **2020**, 367, 376-389		15
218	Effect of element wall thickness on the homogeneity and isotropy of hardness in SLM IN718 using nanoindentation. **2021**, 114, 103568		0
217	Effects of heat treatment on microstructure and mechanical properties of selective laser melted Ti-6Al-4V lattice materials. **2021**, 190, 106042		28
216	Effect of Ni content on the transformation behavior and mechanical property of NiTi shape memory alloys fabricated by laser powder bed fusion. **2021**, 134, 106653		7
215	Effects of the powder, laser parameters and surface conditions on the molten pool formation in the selective laser melting of IN718. **2021**, 289, 116930		11
214	Microstructure and mechanical behavior of bright crescent areas in Inconel 718 sample fabricated by selective laser melting. **2021**, 197, 109259		3
213	Hot Deformation Behavior and Dynamic Recrystallization Nucleation Mechanisms of Inconel 625 during Hot Compressive Deformation. *Advanced Engineering Materials*, **2021**, 23, 2001048	3.5	4
212	Investigation on the influence of heat treatment on Inconel 718 fabricated by selective laser melting: Microstructure and high temperature tensile property. **2021**, 61, 35-45		15

211	The Effect of and Phase Precipitation on the Mechanical Properties of Inconel 718 Manufactured by Selective Laser Melting: An In Situ Neutron Diffraction and Acoustic Emission Study. **2021**, 73, 223-232		5
210	Microstructure and Residual Stress Evolution of Laser Powder Bed Fused Inconel 718 under Heat Treatments. **2021**, 30, 565-574		9
209	Selective laser melting of Al-3.48Cu-2.03Si-0.48Sc-0.28Zr alloy: Microstructure evolution, properties and metallurgical defects. **2021**, 129, 107008		9
208	A recrystallization heat-treatment to reduce deformation anisotropy of additively manufactured Inconel 718. **2021**, 198, 109228		18
207	X-ray diffraction analysis of powders, obtained by electroerosive dispersion of a W-Ni-Fe alloy. **2021**, 38, 1463-1466		
206	Dimensional characteristics of wear-resistant electroerosive titanium-tungsten-cobalt powders for galvanic coatings. **2021**, 38, 1502-1504		
205	Microstructures and mechanical properties of GTD222 superalloy fabricated by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 807, 140668	5.3	5
204	Isothermal Solid-State Transformations of Inconel 718 Alloy Fabricated by Selective Laser Melting. *Advanced Engineering Materials*, **2021**, 23, 2000982	3.5	2
203	The effect of hot isostatic pressing and heat treatment on the microstructure and properties of EP741NP nickel alloy manufactured by laser powder bed fusion. **2021**, 37, 101629		4
202	Methods and materials for additive manufacturing: A critical review on advancements and challenges. **2021**, 159, 107228		35
201	Investigation of mechanical properties and microstructures of GH536 fabricated by laser powder bed fusion additive manufacturing. **2021**, 235, 155-165		3
200	Deformation mechanisms of Inconel-718 at the nanoscale by molecular dynamics. **2021**, 23, 10650-10661		2
199	Influence of the post-processing operations on surface integrity of metal components produced by laser powder bed fusion additive manufacturing: a review. **2021**, 25, 118-176		16
198	Investigation of the microhardness of the W-Ni-Fe powder alloy used for the restoration of machine parts. **2021**, 341, 00017		
197	Granulometric composition of powders, obtained by electroerosive dispersion of high-chromium steel in kerosene. **2021**, 38, 1719-1722		
196	Influence of heat treatment on the fatigue resistance of Inconel 718 fabricated by selective laser melting (SLM). **2021**, 46, 7860-7865		3
195	Pore-affected fatigue life scattering and prediction of additively manufactured Inconel 718: An investigation based on miniature specimen testing and machine learning approach. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 802, 140693	5.3	16
194	Thermal Stability of Nanocrystalline Gradient Inconel 718 Alloy. **2021**, 11, 53		0

193	Effect of solutionizing temperature on the microstructural evolution during double aging of powder bed fusion-additive manufactured IN718 alloy. **2021**, 172, 110868		4
192	TEM Characterization of Microstructure Evolution and Mechanical Behavior of the 3D-Printed Inconel 718 Exposed to High Temperature. **2021**, 27, 250-256		1
191	Phase Transformations During Homogenization of Inconel 718 Alloy Fabricated by Suction Casting and Laser Powder Bed Fusion: A CALPHAD Case Study Evaluating Different Homogenization Models. **2021**, 42, 28-41		1
190	Thermoelectrics. **2021**, 327-350		0
189	Microstructural, mechanical and wear behaviour of Inconel-718 produced through laser-powder bed-fused additive manufacturing. **2021**, 37, 326-337		4
188	Characterization of precipitation in gradient Inconel 718 superalloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 804, 140718	5.3	7
187	Effect of input energy on hardness and surface quality in Ti64 by sputter-less selective laser melting with modulated pulse. **2021**, 33, 012031		4
186	Residual stresses and heat treatments of Inconel 718 parts manufactured via metal laser beam powder bed fusion: an overview. **2021**, 113, 3139-3162		6
185	Process parameter optimization for selective laser melting of Inconel 718 superalloy and the effects of subsequent heat treatment on the microstructural evolution and mechanical properties. **2021**, 64, 530-543		8
184	Effect of magnetic Field on the microstructure and mechanical properties of inconel 625 superalloy fabricated by wire arc additive manufacturing. **2021**, 64, 10-19		23
183	Improvement in the Mechanical Properties of Additively Manufactured NiCo-Based Superalloy by Tailoring Microstructures. *Advanced Engineering Materials*, **2021**, 23, 2100136	3.5	
182	Strengthening mechanisms in selective laser-melted Inconel718 superalloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 812, 141145	5.3	21
181	Failure analysis of bio-inspired corrugated sandwich structures fabricated by laser powder bed fusion under three-point bending. **2021**, 263, 113724		8
180	Precipitate growth kinetics under inhomogeneous concentration fields using a phase-field model. **2021**, 5,		
179	Impact of laser scanning speed on microstructure and mechanical properties of Inconel 718 alloys by selective laser melting. **2021**, 18, 170-179		1
178	Correlative Synchrotron X-ray Imaging and Diffraction of Directed Energy Deposition Additive Manufacturing. **2021**, 209, 116777		17
177	Microhardness as a Function of Process Parameters in Additively Manufactured Alloy 718. **2021**, 30, 6630-6639		0
176	Influence of Heat treatments on Microstructure and Mechanical Properties of Additive Manufactured Inconel 718 Superalloy. **2021**, 6, 1049		1

175	Effects of process interruptions on microstructure and mechanical properties of three face centered cubic alloys processed by laser powder bed fusion. **2021**, 66, 397-406		2
174	Powder Bed Fusion of nickel-based superalloys: A review. *International Journal of Machine Tools and Manufacture*, **2021**, 165, 103729	9.4	48
173	Tailoring of the Microstructure of Laser Powder Bed Fused Inconel 718 Using Solution Annealing and Aging Treatments. **2021**, 11, 921		3
172	Microstructural evolution and mechanisms in additively manufactured AlCrCuFeNix complex concentrated alloys via selective laser melting. *Journal of Alloys and Compounds*, **2021**, 870, 159443	5.7	5
171	Influence of laser parameters on segregation of Nb during selective laser melting of Inconel 718. **2021**, 18, 379-388		1
170	Additive manufacturing of aluminium alloy 2024 by laser powder bed fusion: microstructural evolution, defects and mechanical properties. **2021**, ahead-of-print,		6
169	Strain Rate and Temperature Effects in Nanoindentation Testing on Hardness in Selective Laser Melting IN718. **2022**, 144,		0
168	Experimental investigation into microstructure, mechanical properties, and cracking mechanism of IN713LC processed by laser powder bed fusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 819, 141527	5.3	9
167	Mechanical and Chemical Characterisation of TiN and AlTiSiN Coatings on a LPBF Processed IN718 Substrate. **2021**, 14,		3
166	Effect of Scan Speed and Laser Power on the Nature of Defects, Microstructures and Microhardness of 3D-Printed Inconel 718 Alloy. **2021**, 30, 7057-7070		1
165	Influence of the base material on the mechanical behaviors of polycrystal-like meta-crystals. 2150004		1
164	Contribution of hot isostatic pressing on densification, microstructure evolution, and mechanical anisotropy of additively manufactured IN718 Ni-based superalloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 823, 141721	5.3	1
163	A Prediction Model for Additive Manufacturing of Inconel 718 Superalloy. **2021**, 11, 8010		4
162	Study of Technological Parameters Influence on Quality of Bulk Samples Manufactured from Inconel 718 by the Selective Laser Melting Method. **2021**, 43, 741-752		0
161	Microstructure and machinability evaluation in micro milling of selective laser melted Inconel 718 alloy. *Journal of Materials Research and Technology*, **2021**, 14, 348-362	5.5	14
160	Microstructure and Elements Concentration of Inconel 713LC during Laser Powder Bed Fusion through a Modified Cellular Automaton Model. **2021**, 11, 1065		3
159	Effect of Heat Treatment on the Microstructure and Properties of Inconel 718 Alloy Fabricated by Selective Laser Melting. 1		0
158	Review of Powder Bed Fusion Additive Manufacturing for Metals. **2021**, 11, 1391		12

157	Integrated control of molten pool morphology and solidification texture by adjusting pulse duration in laser additive manufacturing of Inconel 718. **2021**, 142, 107137		7
156	High strain rate effect on tensile ductility and fracture of AM fabricated Inconel 718 with voided microstructures. **2021**, 208, 109908		1
155	Fracture and fatigue in additively manufactured metals. **2021**, 219, 117240		20
154	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. **2021**, 47, 102258		0
153	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. **2021**, 47, 102255		2
152	Precipitation behavior of □phase and its effect on stress rupture properties of selective laser-melted Inconel 718 superalloy. **2021**, 224, 109202		2
151	Direct laser metal deposition additive manufacturing of Inconel 718 superalloy: Statistical modelling and optimization by design of experiments. **2021**, 144, 107380		11
150	In-situ and ex-situ comparison of oxidation of Inconel 718 manufactured by selective laser melting and conventional methods up to 650□□C. **2021**, 569, 151037		1
149	Influence of post-processing on very high cycle fatigue resistance of Inconel 718 obtained with laser powder bed fusion. *International Journal of Fatigue*, **2021**, 153, 106510	5	6
148	Microstructure and mechanical performance of ODS superalloys manufactured by selective laser melting. **2021**, 144, 107423		4
147	Alloy design and adaptation for additive manufacture. **2022**, 299, 117358		10
146	Hydrogen-assisted failure in Inconel 718 fabricated by laser powder bed fusion: The role of solidification substructure in the embrittlement. **2022**, 207, 114308		2
145	Structure and mechanical properties of powders obtained by electrodisperging cobalt-chromium alloy. **2021**, 19, 230-236		1
144	Laser polishing of additive-manufactured Ti alloys and Ni alloys. **2021**, 343-368		1
143	Influence of grain inhomogeneity and precipitates on the stress rupture properties of Inconel 718 superalloy fabricated by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 803, 140702	5.3	4
142	Effect of Carbide Inoculants Additions in IN718 Fabricated by Selective Laser Melting Process. **2020**, 982-989		3
141	Microstructures of Inconel 718 by Selective Laser Melting. **2015**, 461-468		3
140	Growth and spectroscopic properties of Yb0.1Gd1.8La0□1SiO5 crystal: A promising new laser material for ultrashort laser. **2020**, 224, 117340		2

139	Thermo-mechanical simulation of track development in the Laser Beam Melting process - Effect of laser-metal interaction. 529, 012005	2
138	Effect of Post Heat Treatment on the Microstructure and Tensile Properties of Nano TiC Particulate Reinforced Inconel 718 by Selective Laser Melting. **2020**, 142,	10
137	Influence of energy input on spatter generation of 316L stainless steel fabrication by SLM in vacuum. **2019**,	1
136	Titanium Alloy Plate Fabrication by Sputter-less Selective Laser Melting. **2017**, 137, 265-270	4
135	Specific Characteristics of Materials Produced by Additive Manufacturing as Compared to Those Produced by Established Manufacturing Methods taking the Example of Alloy 718. **2020**, 57, 228-249	1
134	Analysis of Microstructure and Mechanical Properties in As-Built/As-Cast and Heat-Treated Conditions for IN718 Alloy Obtained by Selective Laser Melting and Investment Casting Processes. **2021**, 11, 1196	2
133	Effect of energy on Ti plate fabrication by vacuum selective laser melting for uniformity of grain size. **2021**, 33, 042027	1
132	Laser powder bed fused Inconel 718 in stress-relieved and solution heat-treated conditions. **2021**, 181, 111499	1
131	Microstructure and mechanical properties of Ti-6.5Al-2Zr-Mo-V alloy processed by Laser Powder Bed Fusion and subsequent heat treatments. **2021**, 48, 102382	0
130	Tensile properties of 304 stainless steel fabricated by selective laser melting. **2012**,	
129	Selective Laser Melting: Characteristics of IN718 Powder and Microstructures of Fabricated IN718 Sample. **2015**, 29-37	
128	Experimental investigation on crystal orientation of Ti6Al4V plate fabricated by vacuum SLM process. **2015**,	
127	Effect on beam profile of Ti plate fabricated by L-PBF in vacuum. **2016**,	
126	Development Trend and Progress of Laser Additive Manufacturing for Metal. **2017**, 56, 691-694	
125	Effect of baseplate temperature on sputter-generation for development of SLM in vacuum. **2017**,	
124	Design for Additive Manufacturing. **2017**, 81-160	2
123	RESEARCH OF INFLUENCE OF PARAMETERS OF DISPERSION IN THE PARTICLE SIZE COBALT POWDERS ARE OBTAINED FOR ADDITIVE TECHNOLOGIES EDM DISPERSION IN ALCOHOL. **2017**, 21, 70-77	
122	THE STUDY OF POROSITY OF SINTERED SAMPLES OF COBALT-CHROMIUM ELECTROEROSION POWDERS. **2017**, 21, 51-59	1

121	Development of Sputter-Free Selective Laser Melting. **2018**, 46, 249	
120	X-ray spectral microanalysis of sintered samples from electroerosive cobalt-chromium powders. **2018**, 16, 83-86	
119	THE MICROHARDNESS OF THE ADDITIVE PRODUCTS OF THE ELECTRICAL DISCHARGE MACHINING OF COBALT POWDERS. **2018**, 22, 15-23	
118	Mechanical Properties of Inconel Alloy 718 Produced by 3D Printing using DMLS. **2018**, 18, 559-562	2
117	Effect of Spatter Suppression on Ti Plate Fabricated by SLM in Vacuum. **2019**, 8, 9-13	
116	X-RAY DIFFRACTION ANALYSIS OF THE ADDITIVE PRODUCTS OF ELECTRICAL DISCHARGE MACHINING OF COBALT POWDERS. **2019**, 22, 6-13	
115	The Study of Particle Size Distribution of Electroerosion Chrome-Containing Powder, Used for Wear Resistant Surfacing. **2019**, 23, 31-41	
114	Study of the Influence of the Granulometric Composition of Electrospark Cobalt-Chromium Powders on the Physical and Mechanical Properties of Additive Products. **2019**, 23, 57-71	
113	DEPOSITION OF TiAlV THIN FILMS BY PULSED LASER AND DC MAGNETRON SPUTTERING: STRUCTURAL, COMPOSITIONAL AND ELECTROCHEMICAL CORROSION STUDY. **2020**, 27, 1950188	
112	Analysis of Wear Resistance Characteristics of Additive Products Made from Electroerosive Cobalt-Chromium Powders. **2019**, 23, 67-81	
111	The Role of Microstructural Homogenization on Tensile and Stress-Rupture Behavior of Selective Laser Melted Nickel Based 718 Alloy. **2020**, 803-813	
110	Phase structure and composition of nickel-based superalloy subject to synthesis by selective laser melting parameters and heat treatment. **2020**, 14-22	
109	Optimization and Finite Element Modelling of Tool Wear in Milling of Inconel 625 Superalloy.	2
108	The Impact of Building Orientation on Microhardness and Surface Roughness of Direct Metal Laser Sintered Inconel Alloy. **2021**, 619-628	0
107	Investigation of Microstructure and Mechanical Properties of SLM-Produced Inconel 718 and Hastelloy-X Alloys. **2020**, 340-351	
106	Pure titanium fabrication with spatter-less selective laser melting in vacuum. **2021**, 5, 100184	1
105	Cost-Aware Design and Fabrication of New Support Structures in Laser Powder Bed Fusion: Microstructure and Metallurgical Properties. **2021**, 11, 10127	2
104	Preparation of Graphene Oxide Based Hydrogel for Diabetics Foot Ulcer. 993, 012164	

103	Heat Treated Microstructures and Properties of Additively Manufactured IN718 Superalloy. **2020**, 121, 1382-1392		
102	X-ray spectral microanalysis of hardened additive products made of electroerosion cobalt-chromium alloys. **2020**, 329, 02014		
101	Design and Characterization of Additively Manufactured NGVs Operated in a Small Industrial Gas Turbine. **2020**, 11, 36-44		3
100	Experimental Study of Single Tracks Obtained from a Mixture of Ti and Al Powders with Variable Parameters of the Selective Laser Melting Process. **2021**, 62, 539-544		
99	In situ microstructure analysis of Inconel 625 during laser powder bed fusion. 1		2
98	Laser Powder Bed Fusion (LPBF) of In718 and the Impact of Pre-Heating at 500 and 1000 ℃: Operando Study. **2021**, 14,		4
97	Study of the Additive Products of Electroerosive Cobalt-Chrome Powders by X-Ray Methods. **2020**, 14, 1279-1286		
96	Laser Cladding of Ni-Based Superalloys. **2021**, 293-331		
95	Improving surface quality and superficial microstructure of LDED Inconel 718 superalloy processed by hybrid laser polishing. **2022**, 300, 117428		5
94	Cascading of the as-built microstructure through heat treatment and its role on the tensile properties of laser powder bed fused Inconel 718. **2022**, 21, 101272		3
93	3D Multi-Track and Multi-Layer Epitaxy Grain Growth Simulations of Selective Laser Melting. **2021**, 14,		3
92	The evolution of microstructure and composition homogeneity induced by borders in laser powder bed fused Inconel 718 parts. *Journal of Alloys and Compounds*, **2021**, 898, 162787	5.7	0
91	A review on metallurgical aspects of laser additive manufacturing (LAM): Stainless steels, nickel superalloys, and titanium alloys. *Journal of Materials Research and Technology*, **2022**, 16, 1029-1068	5.5	5
90	Laser powder bed fusion of the Mn-Cu alloys: Printability, microstructure, and mechanical properties. *Journal of Alloys and Compounds*, **2022**, 899, 163385	5.7	0
89	Effect of machining and drag finishing on the surface integrity and mechanical properties of Inconel 718 alloys fabricated by laser powder bed fusion additive manufacturing. **2022**, 53, 109-118		0
88	Experimental investigation of laser scan strategy on the microstructure and properties of Inconel 718 parts fabricated by laser powder bed fusion. **2022**, 186, 111765		2
87	Crystal plasticity modeling of additively manufactured metallic microstructures. **2022**, 35, 219-227		1
86	Tribological Property and Thermal Shock Resistance of NiCoCrAlY Coated YSZ Composite Coatings Prepared by Different Laser Additive Manufacturing Scanning Speeds. **2022**, 103184		

85	Additive Products from Electroerosion of Cobalt-Chromium Powder. **2022**, 65, 1157-1162		
84	Fatigue behavior and modeling of additively manufactured IN718: The effect of surface treatments and surface measurement techniques. **2022**, 302, 117475		4
83	High-speed machining of additively manufactured Inconel 718 using hybrid cryogenic cooling methods. 1-18		0
82	Stability of the microstructure and elevated-temperature mechanical properties of additively manufactured Inconel 718 superalloy subjected to long-term in-service thermal cycling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**,	5.3	2
81	Effects of a modified heat-treatment on microstructure and mechanical properties of additively manufactured Inconel 718. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 838, 142770	5.3	1
80	Corrosion Behavior of Additively Manufactured Inconel 718 Followed by Post Processing. *SSRN Electronic Journal*,	1	
79	The Influence of Building Direction as Well as Conventional Heat Treatment on the Microstructure, Physical, and Mechanical Characteristics of a Direct Metal Laser Sintered Inconel 718 Alloy. *SSRN Electronic Journal*,	1	
78	Effect of test temperature and strain-rate on elevated temperature tensile tests of Inconel 718 prepared by selective laser melting. **2022**,		
77	Laser Powder Bed Fusion of K418 Superalloy: Process, Microstructure, Texture Feature, and Mechanical Property. **2022**, 12, 611		
76	Effects of sandblasting and HIP on very high cycle fatigue performance of SLM-fabricated IN718 superalloy. *Journal of Materials Research and Technology*, **2022**, 18, 29-43	5.5	1
75	Accelerating optimization of IN718 by mapping alloying effects on phase stabilities and mechanical properties using high-throughput calculations. **2022**, 217, 110603		1
74	The manufacturing process optimization and the mechanical properties of FeCoCrNi high entropy alloys fabricated by selective laser melting. **2022**, 145, 107557		1
73	A critical review on the microstructure and mechanical properties correlation of additively manufactured nickel-based superalloys. *Journal of Alloys and Compounds*, **2022**, 907, 164530	5.7	8
72	Effect of Fusion Temperature of Electric-Discharge Erosion Cobalt□hromium Powder Particles on the Quality of Additive Products. **2021**, 50, 562-568		0
71	On the Effect of Heat Input and Interpass Temperature on the Performance of Inconel 625 Alloy Deposited Using Wire Arc Additive Manufacturing□old Metal Transfer Process. **2022**, 12, 46		1
70	Structure and Properties of the Powders Produced by the Electrodispersion of the Aluminum Waste and Intended for Additive Technologies. **2021**, 2021, 1598-1603		
69	Studies on Mechanical Attrition and Surface Analysis on Heat-Treated Nickel Alloy Developed through Additive Manufacturing. **2022**, 2022, 1-8		
68	Anisotropic damage evolution and modeling for a nickel-based superalloy built by additive manufacturing. **2022**, 108450		1

67	Microstructural Impact on Fatigue Crack Growth Behavior of Alloy 718. **2022**, 12, 710		2
66	The Mechanism of In-Situ Laser Polishing and Its Effect on the Surface Quality of Nickel-Based Alloy Fabricated by Selective Laser Melting. **2022**, 12, 778		0
65	Evaluation of the Possibility of Application of Electroerosive Cobalt□Chromium Powders for Manufacturing Products via Additive Manufacturing.		
64	Microstructure and mechanical properties of in-situ synthesized Ti(N,C) strengthen IN718/1040 steel laminate by directed energy deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 143247	5.3	0
63	A comprehensive literature review on laser powder bed fusion of Inconel superalloys. **2022**, 102871		1
62	Improving Productivity in the Laser Powder Bed Fusion of Inconel 718 by Increasing Layer Thickness: Effects on Mechanical Behavior.		1
61	The microstructure evolution and precipitation behavior of TiB2/Inconel 718 composites manufactured by selective laser melting. **2022**, 79, 510-519		0
60	Additive manufacturing of functionally graded inconel 718: Effect of heat treatment and building orientation on microstructure and fatigue behaviour. **2022**, 306, 117573		1
59	Effect of post fabrication aging treatment on the microstructure, crystallographic texture and elevated temperature mechanical properties of IN718 alloy fabricated by selective laser melting. **2022**, 306, 117622		0
58	The effect of absorption ratio on meltpool features in laser-based powder bed fusion of IN718. **2022**, 153, 108263		19
57	Thermodynamic coupling in the computation of dendrite growth kinetics for multicomponent alloys. **2022**, 77, 102429		
56	The influence of laser power and scanning speed on the microstructure and surface morphology of Cu2O parts in SLM. **2022**, ahead-of-print,		2
55	Microstructure Evolution and Tensile Properties of a Selectively Laser Melted CoNi-Base Superalloy.		0
54	The influence of building direction and conventional heat treatment on the microstructure, physical, and mechanical characteristics of direct metal laser sintered Inconel 718 alloy. 1-25		
53	Effect of Titanium Nitride Inclusions on the Mechanical Properties of Direct Laser Deposited Inconel 718. *SSRN Electronic Journal*,	1	
52	Post-processing of additively manufactured metallic alloys □A review. *International Journal of Machine Tools and Manufacture*, **2022**, 103908	9.4	3
51	Investigation of novel post-thermal treatments of alloy 718 fabricated by modulated laser powder bed fusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 143502	5.3	0
50	Microstructural evolution & Corrosion behavior of Laser □powder-bed □fused Inconel 718 subjected to surface and heat treatments. *Journal of Materials Research and Technology*, **2022**,	5.5	

49	Multi-axial fatigue life assessment of additively manufactured nickel-based superalloys. *International Journal of Fatigue*, **2022**, 163, 107049	5	0
48	Surface Morphology Refinement and Laves Phase Control of Plasma Arc Additively Manufactured Inconel 718 Via an Alternating Magnetic Field. *SSRN Electronic Journal*,	1	
47	Oxidation behavior of Hastelloy X alloy fabricated by selective laser melting and subsequent hot isostatic pressing treatment. *Advanced Engineering Materials*,	3.5	0
46	Selective laser melting of CuCrZr alloy: processing optimisation, microstructure and mechanical properties. *Journal of Materials Research and Technology*, **2022**,	5.5	0
45	Inconel 718 produced by laser powder bed fusion: an overview of the influence of processing parameters on microstructural and mechanical properties. **2022**, 121, 5651-5675		0
44	Development of Micro Laser Powder Bed Fusion for Additive Manufacturing of Inconel 718. **2022**, 15, 5231		
43	Powder bed fusion additive manufacturing of Ni-based superalloys: a review of the main microstructural constituents and characterization techniques. **2022**, 57, 14135-14187		2
42	Development of microstructure - processing correlations of Inconel718 through additive manufacturing. **2022**,		
41	Influence of laser powder bed fusion scanning pattern on residual stress and microstructure of alloy 718. **2022**, 221, 110983		0
40	Effect of heat treatment on microstructure and small punch creep property of selective laser melted Inconel 718 alloy. **2022**, 853, 143748		0
39	Influence of heat treatment on the tool life while machining SLM Inconel 718 with reference to C&W Inconel 718. **2022**, 83, 192-202		0
38	Unravelling heterogeneities in sub-grain cellular structure and micromechanical response of additive manufactured Ti-Nb alloys. **2022**, 59, 103146		1
37	Surface morphology refinement and Laves phase control of plasma arc additively manufactured Inconel 718 via an alternating magnetic field. **2022**, 223, 111161		1
36	A review and a statistical analysis of porosity in metals additively manufactured by laser powder bed fusion. **2020**, 210058-210058		0
35	Development of surface roughness from additive manufacturing processing parameters and postprocessing surface modification techniques. **2022**, 193-222		1
34	Powder bed fusion□based additive manufacturing: SLS, SLM, SHS, and DMLS. **2022**, 1-37		0
33	Inconel 718□copper parts fabricated by 3D multi-material laser powder bed fusion: a novel technological and designing approach for rocket engine. **2022**, 122, 2113-2123		0
32	Effect of modulated pulses on the fabrication of Ti-6al-4v by spatter-less selective laser melting in vacuum. **2022**, 128,		0

31	X-ray spectral microanalysis of W-Ni-Fe heavy tungsten alloy particles used for the restoration of agricultural machinery parts. **2022**,	0
30	Investigation of the sinterability of cobalt-chromium powders used for the restoration of agricultural machinery parts. **2022**,	0
29	Effects of Specimen Orientation and Heat Treatment on Microstructure and Crack Propagation Path of the IN718 Alloy Built by the Additive Manufacturing Process.	0
28	Influence of GTAW parameters on the mechanical properties and microstructure of wire arc additive manufactured Inconel 625. **2022**,	0
27	Electron and laser-based additive manufacturing of Ni-based superalloys: A review of heterogeneities in microstructure and mechanical properties. **2022**, 223, 111245	1
26	Coupled effect of microstructure and topology on the mechanical behavior of Inconel718 additively manufactured lattices. **2022**, 111294	0
25	Effect of Post-processing on Corrosion Behavior of LPBF Built Inconel 718 Alloy.	0
24	Effect of Scanning Speed on Microstructure and Properties of Inconel 718 Fabricated by Laser Powder Bed Fusion.	0
23	Directed energy deposition of γ/γ′ Co-Al-W superalloys. **2022**, 103287	0
22	Heat treatment for metal additive manufacturing. **2023**, 133, 101051	1
21	Effect of powder particle size distribution on the surface finish of components manufactured by laser powder bed fusion.	0
20	Interface Characteristics and Mechanical Properties of Post-treated Directed Energy Deposition Laminated Composites.	0
19	A State-of-the-Art Review on Fatigue Performance of Powder Bed Fusion-Built Alloy 718. **2022**, 101066	1
18	The Influence of Laser Powder Bed Fusion (L-PBF) Process Parameters on 3D-Printed Quality and Stress–Strain Behavior of High-Entropy Alloy (HEA) Rod-Lattices. **2022**, 12, 2109	0
17	Selective Laser Melting (SLM) Additively Manufactured CoCrFeNiMn High-Entropy Alloy: Process Optimization, Microscale Mechanical Mechanism, and High-Cycle Fatigue Behavior. **2022**, 15, 8560	0
16	Role of microstructural phases in enhanced mechanical properties of additively manufactured IN718 alloy. **2022**, 144484	1
15	Experimental study of single tracks obtained from a mixture of Ti and Al powders with varying selective laser melting parameters. **2021**, 51-58	0
14	Residual Strains in an Additively Processed Ni-based Superalloy Transpiration-Cooled Aerodynamic Leading Edge Structure using Neutron Diffraction. **2023**,	0

13	A Method to Optimize Parameters Development in L-PBF Based on Single and Multitracks Analysis: A Case Study on Inconel 718 Alloy. **2023**, 13, 306	0
12	The heterogeneous microstructure in laser powder bed fabricated Inconel 718 pillar and its influence on mechanical properties. **2023**, 872, 144953	0
11	Wear mechanism, subsurface structure and nanomechanical properties of additive manufactured Inconel nickel (IN718) alloy. **2023**, 523, 204863	0
10	Modified heat treatment and related microstructure-mechanical property evolution of arc melting additively manufactured GH4169 Ni-based superalloy. **2023**, 947, 169449	0
9	Effect of titanium nitride inclusions on the mechanical properties of direct laser deposited Inconel 718. **2023**, 61, 102009	0
8	Effects of heat treatments on the microstructure and tensile properties of IN738 superalloy with high carbon content fabricated via laser powder bed fusion. **2023**, 953, 170110	0
7	High-Throughput Investigation of Multiscale Deformation Mechanism in Additively Manufactured Ni Superalloy. **2023**, 13, 420	0
6	Effect of Scanning Process and Heat Treatment on Microstructure and Mechanical Property of Inconel 718 Fabricated by Selective Laser Melting.	0
5	Metallic Coatings through Additive Manufacturing: A Review. **2023**, 16, 2325	0
4	Selective laser melting of Inconel 718: Effect of thermal treatment on mechanical properties. **2023**,	0
3	???????TiC????Inconel 718???????????????. **2023**, 50, 0802307	0
2	A lightweight Fe□Mn□Al□ austenitic steel with ultra-high strength and ductility fabricated via laser powder bed fusion. **2023**, 145007	0
1	Correlating Alloy Inconel 718 Solidification Microstructure to Local Thermal History Using Laser Powder Bed Fusion Process Monitoring. **2023**, 595-611	0