Mathieu Brochu

List of Publications by Year
in descending order

184	4,073	117571	175177
papers	citations	34 h-index	52 g-index

195	195	195	3244
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Densification and microstructural investigation of Inconel 718 parts fabricated by selective laser melting. Powder Technology, 2017, 310, 60-66.	2.1	201
2	Microstructure and mechanical properties of stainless steel 316L vertical struts manufactured by laser powder bed fusion process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 27-40.	2.6	134
3	Crystallographic-orientation-dependent tensile behaviours of stainless steel 316L fabricated by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 766, 138395.	2.6	118
4	Microstructure and mechanical property considerations in additive manufacturing of aluminum alloys. MRS Bulletin, 2016, 41, 745-751.	1.7	104
5	Electron beam freeforming of stainless steel using solid wire feed. Materials & Design, 2007, 28, 2278-2286.	5.1	85
6	Additive Manufacturing of AlSi10Mg Alloy Using Direct Energy Deposition: Microstructure and Hardness Characterization. Journal of Thermal Spray Technology, 2017, 26, 587-597.	1.6	82
7	Additive Manufacturing of Al-12Si Alloy Via Pulsed Selective Laser Melting. Jom, 2015, 67, 590-596.	0.9	79
8	Synthesis and consolidation via spark plasma sintering of nanostructured Al-5356/B4C composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4395-4407.	2.6	78
9	A Comprehensive Approach to Powder Feedstock Characterization for Powder Bed Fusion Additive Manufacturing: A Case Study on AlSi7Mg. Materials, 2018, 11, 2386.	1.3	77
10	Microstructure and mechanical properties of B4C reinforced Al-based matrix composite coatings deposited by CGDS and PGDS processes. Surface and Coatings Technology, 2010, 205, 2234-2246.	2.2	71
11	Solidification pattern, microstructure and texture development in Laser Powder Bed Fusion (LPBF) of Al10SiMg alloy. Materials Characterization, 2018, 145, 29-38.	1.9	70
12	Comparison between barium and strontium-glass composites for sealing SOFCs. Journal of the European Ceramic Society, 2006, 26, 3307-3313.	2.8	66
13	Thermal stability and oxidation behavior of nanostructured NiCoCrAlY coatings. Surface and Coatings Technology, 2011, 205, 4162-4168.	2.2	66
14	Consolidation of aluminum-based metal matrix composites via spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 648, 123-133.	2.6	65
15	Selective laser melting and heat treatment of precipitation hardening stainless steel with a refined microstructure and excellent mechanical properties. Scripta Materialia, 2020, 178, 7-12.	2.6	65
16	Nanocrystalline eutectic Alâ€“Si alloy produced by cryomilling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 508, 43-49.	2.6	64
17	Formation of amorphous Zr41.2Ti13.8Ni10Cu12.5Be22.5 coatings via the ElectroSpark Deposition process. Intermetallics, 2008, 16, 518-523.	1.8	58
18	Fatigue strength of Al alloy cold sprayed with nanocrystalline powders. International Journal of Fatigue, 2014, 65, 51-57.	2.8	56

#	Article	IF	Citations
19	Characterization of Alâ€“Li 2099 extrusions and the influence of fiber texture on the anisotropy of static mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 62-69.	2.6	54
20	Nickel-based superalloy microstructure obtained by pulsed laser powder bed fusion. Materials Characterization, 2017, 131, 306-315.	1.9	54
21	Joining silicon nitride ceramic using a composite powder as active brazing alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 374, 34-42.	2.6	53
22	Densification Behavior of 316L Stainless Steel Parts Fabricated by Selective Laser Melting by Variation in Laser Energy Density. Materials Transactions, 2016, 57, 1952-1959.	0.4	51
23	Characterization of single crystalline austenitic stainless steel thin struts processed by laser powder bed fusion. Scripta Materialia, 2019, 163, 51-56.	2.6	49
24	Fabrication of Crack-Free Nickel-Based Superalloy Considered Non-Weldable during Laser Powder Bed Fusion. Materials, 2018, 11, 1288.	1.3	47
25	Pressureless sintering of cold sprayed Inconel 718 deposit. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 343-350.	2.6	46
26	Titanium Alloy Repair with Wire-Feed Electron Beam Additive Manufacturing Technology. Advances in Materials Science and Engineering, 2019, 2019, 1-23.	1.0	45
27	Multi-Objective Build Orientation Optimization for Powder Bed Fusion by Laser. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2017, 139, .	1.3	43
28	Microstructure and mechanical properties of air atomized aluminum powder consolidated via spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 608, 273-282.	2.6	42
29	Characterization of bending vibration fatigue of SLM fabricated Ti-6Al-4V. International Journal of Fatigue, 2017, 99, 25-34.	2.8	42
30	The effect of grain size on the oxidation of NiCoCrAlY. Applied Surface Science, 2014, 301, 258-263.	3.1	39
31	Microstructure and mechanical properties of Al10SiMg fabricated by pulsed laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 689, 53-62.	2.6	39
32	Pressureless reactive sintering of ZrB2 ceramic. Journal of the European Ceramic Society, 2009, 29, 1493-1499.	2.8	38
33	Dependence of mechanical properties on crystallographic orientation in nickel-based superalloy Hastelloy X fabricated by laser powder bed fusion. Journal of Alloys and Compounds, 2021, 865, 158868.	2.8	38
34	Parameters influencing the oxidation behavior of cryomilled CoNiCrAlY. Surface and Coatings Technology, 2010, 205, 2546-2553.	2.2	37
35	Interfacial morphology development and solute trapping behavior during rapid solidification of an Alâ€“Liâ€“Cu alloy. Acta Materialia, 2013, 61, 1571-1580.	3.8	37
36	Solidification microstructure simulation of Ti-6Al-4V in metal additive manufacturing: A review. Additive Manufacturing, 2020, 31, 100989.	1.7	36

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37	Microstructure and mechanical properties at room and elevated temperature of crack-free Hastelloy X fabricated by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 780, 139177.	2.6	35
38	Microstructure evolution of Inconel 625 with 0.4Âwt% boron modification during gas tungsten arc deposition. Journal of Alloys and Compounds, 2017, 694, 429-438.	2.8	34
39	Cold gas dynamic spraying as a method for freeforming and joining materials. Surface and Coatings Technology, 2008, 202, 2801-2806.	2.2	33
40	Development of a nanostructure microstructure in the Alâ€“Ni system using the electrospark deposition process. Journal of Materials Processing Technology, 2010, 210, 892-898.	3.1	33
41	Microstructure and mechanical properties of rene 41 alloy manufactured by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138849.	2.6	33
42	Brazing silicon nitride to an iron-based intermetallic using a copper interlayer. Ceramics International, 2004, 30, 901-910.	2.3	32
43	Fabrication of bulk nanostructured silver material from nanopowders using shockwave consolidation technique. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 487, 219-227.	2.6	30
44	Characterization of electron beam welded AA2024. Vacuum, 2010, 85, 268-282.	1.6	30
45	Understanding the solidification and microstructure evolution during CSC-MIG welding of Feâ€“Crâ€“B-based alloy. Materials Characterization, 2013, 86, 127-138.	1.9	30
46	Microstructure evolution of Inconel 738 fabricated by pulsed laser powder bed fusion. Progress in Additive Manufacturing, 2019, 4, 97-107.	2.5	30
47	The transformation of an Al-based crystalline electrode material to an amorphous deposit via the electrospark welding process. Journal of Alloys and Compounds, 2009, 476, 147-151.	2.8	29
48	Microstructure-Properties Relationships of Ti-6Al-4V Parts Fabricated by Selective Laser Melting. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 605-612.	2.7	28
49	Comparison Between Micrometer- and Nano-Scale Glass Composites for Sealing Solid Oxide Fuel Cells. Journal of the American Ceramic Society, 2006, 89, 810-816.	1.9	27
50	Effects of water vapor on high temperature oxidation of cryomilled NiCoCrAlY coatings in air and low-SO2 environments. Surface and Coatings Technology, 2011, 205, 4221-4227.	2.2	27
51	Nanostructured Al-Based Metal Matrix Composite Coating Production by Pulsed Gas Dynamic Spraying Process. Journal of Thermal Spray Technology, 2012, 21, 609-619.	1.6	27
52	Fabrication of UHTCs by Conversion of Dynamically Consolidated Zr+B and Hf+B Powder Mixtures. Journal of the American Ceramic Society, 2008, 91, 2815-2822.	1.9	26
53	Microstructures and properties of SLM-manufactured Cu-15Ni-8Sn alloy. Additive Manufacturing, 2020, 31, 100921.	1.7	26
54	Microstructure and mechanical behavior of as-built and heat-treated Tiâ€“6Alâ€“7Nb produced by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 793, 139978.	2.6	25

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55	Thin Gauge Titanium Manufacturing Using Multiple-Pass Electron Beam Welding. Materials and Manufacturing Processes, 2006, 21, 439-451.	2.7	23
56	Dynamic consolidation of nanostructured Alâ€“7.5%Mg alloy powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 466, 84-89.	2.6	23
57	Analytical fatigue life prediction of shot peened AA 7050-T7451. International Journal of Fatigue, 2019, 118, 271-281.	2.8	23
58	Analysis of WC/Ni-Based Coatings Deposited by Controlled Short-Circuit MIG Welding. Journal of Materials Engineering and Performance, 2012, 21, 865-876.	1.2	22
59	Non-equilibrium solute partitioning in a laser re-melted Alâ€“Liâ€“Cu alloy. Acta Materialia, 2013, 61, 7432-7436.	3.8	22
60	Spark plasma sintering of an Al-based powder blend. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 621, 18-27.	2.6	22
61	Evaluation of Powder Layer Density for the Selective Laser Melting (SLM) Process. Materials Transactions, 2017, 58, 294-297.	0.4	22
62	Tiâ€“6Alâ€“4V electron beam weld qualification using laser scanning confocal microscopy. Materials Characterization, 2005, 54, 254-262.	1.9	21
63	Effect of extrusion aspect ratio and test temperatures on fatigue crack growth behavior of a 2099-T83 Alâ€“Li alloy. International Journal of Fatigue, 2014, 59, 244-253.	2.8	21
64	Pulsed laser powder bed fusion additive manufacturing of A356. Materials Characterization, 2018, 143, 27-33.	1.9	21
65	Transient liquid phase bonding of Cu to Cuâ€“W composite using an electron beam energy source. International Journal of Refractory Metals and Hard Materials, 2007, 25, 67-71.	1.7	20
66	Formation of nanostructured weldments in the Alâ€“Si system using electrospark welding. Applied Surface Science, 2010, 256, 4009-4016.	3.1	20
67	Effect of heat treatments on microstructure evolution and mechanical properties of blended nickel-based superalloys powders fabricated by laser powder deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 674, 646-657.	2.6	20
68	Supersolidus Liquid Phase Sintering Modeling of Inconel 718 Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 869-876.	1.1	20
69	Spark plasma sintering of prealloyed aluminium powders. Powder Metallurgy, 2015, 58, 51-60.	0.9	19
70	Microstructure and transformation of Al-containing nanostructured 316L stainless steel coatings processed using spark plasma sintering. Journal of Materials Processing Technology, 2010, 210, 2119-2124.	3.1	18
71	Selective laser sintering of composite copperâ€“tin powders. Journal of Materials Research, 2014, 29, 1997-2005.	1.2	18
72	The effect of nanostructure on the oxidation of NiAl. Intermetallics, 2014, 54, 209-217.	1.8	18

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73	Interdiffusion between copper and nickel powders and sintering map development during spark plasma sintering. Scripta Materialia, 2015, 100, 74-77.	2.6	18
74	Investigation of the rotating drum technique to characterise powder flow in controlled and low pressure environments. Powder Technology, 2020, 366, 925-937.	2.1	18
75	Effects of crystallographic orientation on the corrosion behavior of stainless steel 316L manufactured by laser powder bed fusion. Corrosion Science, 2022, 196, 110009.	3.0	18
76	Consolidation of cryomilled Alâ€“Si using spark plasma sintering. Philosophical Magazine, 2013, 93, 2445-2464.	0.7	17
77	The effects of applied current on one-dimensional interdiffusion between copper and nickel in spark plasma sintering. Journal of Applied Physics, 2014, 116, .	1.1	17
78	Probabilistic analysis of the effect of shot peening on the high and low cycle fatigue behaviors of AA 7050-T7451. International Journal of Fatigue, 2018, 111, 289-298.	2.8	17
79	Machine Learning-Enabled Competitive Grain Growth Behavior Study in Directed Energy Deposition Fabricated Ti6Al4V. Jom, 2020, 72, 458-464.	0.9	17
80	PTLPB of Si3N4 to FA-129 using nickel as a core interlayer. International Journal of Refractory Metals and Hard Materials, 2004, 22, 95-103.	1.7	16
81	Characterization of bending vibration fatigue of WBD fabricated Ti-6Al-4V. International Journal of Fatigue, 2017, 101, 36-44.	2.8	16
82	High Frequency Vibration Fatigue Behavior of Ti6Al4V Fabricated by Wire-Fed Electron Beam Additive Manufacturing Technology. Advances in Materials Science and Engineering, 2020, 2020, 1-14.	1.0	16
83	Solid freeform fabrication of Alâ€“Si components via the CSC-MIG process. Canadian Metallurgical Quarterly, 2012, 51, 302-312.	0.4	15
84	Effect of heat treatment on microstructure evolution and mechanical properties of Inconel 625 with 0.4 wt% boron modification fabricated by gas tungsten arc deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 275-283.	2.6	15
85	Layer-by-layer combination of laser powder bed fusion (LPBF) and femtosecond laser surface machining of fabricated stainless steel components. Journal of Manufacturing Processes, 2018, 35, 327-336.	2.8	15
86	Single-crystalline-like stainless steel 316L with different geometries fabricated by laser powder bed fusion. Progress in Additive Manufacturing, 2020, 5, 41-49.	2.5	15
87	Evaluation of Maraging Steel Produced Using Hybrid Additive/Subtractive Manufacturing. Journal of Manufacturing and Materials Processing, 2021, 5, 107.	1.0	15
88	Improving the mechanical reliability of cryomilled Alâ€“Mg alloy using a two-stage spark plasma sintering cycle. Scripta Materialia, 2012, 66, 455-458.	2.6	14
89	Spark plasma sintering and age hardening of an Alâ€“Znâ€“Mg alloy powder blend. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 129-138.	2.6	14
90	Effect of travel speed and stress relief on thin Ti-6Al-4V laser wire deposits. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 724, 335-347.	2.6	14

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91	Effect of heat treatments on microstructure evolution and grain morphology of alloy 625 with 0.4â€¯wt% boron modification fabricated by laser wire deposition. Journal of Alloys and Compounds, 2018, 764, 815-823.	2.8	14
92	Impact properties of half stress-relieved and hot isostatic pressed Tiâ€“6Alâ€“4V components fabricated by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 760, 481-488.	2.6	14
93	Cladding AA7075 with a cryomilled Alâ€“12Si alloy using spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 578, 323-330.	2.6	13
94	Surface, microstructure, and tensile deformation characterization of LPBF SS316L microstruts micromachined with femtosecond laser. Materials and Design, 2021, 210, 110045.	3.3	13
95	Electron beam freeforming on type 321 stainless steel using BNi-2 brazing paste. Materials Science and Technology, 2005, 21, 613-618.	0.8	12
96	Bulk nanostructure and amorphous metallic components using the electrospark welding process. Assembly Automation, 2010, 30, 248-256.	1.0	12
97	Microstructure and Tribology of Spark Plasma Sintered Feâ€“Crâ€“B Metamorphic Alloy Powder. Tribology Letters, 2011, 44, 269-278.	1.2	12
98	Spark plasma sintering and spark plasma upsetting of an Al-Zn-Mg-Cu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 704, 154-163.	2.6	12
99	Comparison of small and long fatigue crack growth behavior in AA 7050-T7451. Engineering Fracture Mechanics, 2018, 202, 20-32.	2.0	12
100	Thermo-Mechanical Modeling of Wire-Fed Electron Beam Additive Manufacturing. Materials, 2021, 14, 911.	1.3	12
101	Development of Metastable Solidification Structures Using the Electrospark Deposition Process. The Open Surface Science Journal, 2010, 3, 105-114.	2.0	12
102	Wetting behaviour of copper on an iron aluminide alloy. Intermetallics, 2004, 12, 289-294.	1.8	11
103	Thermal simulation of HAZ regions in modern high strength steel. Canadian Metallurgical Quarterly, 2012, 51, 58-66.	0.4	11
104	Investigating cube-corner indentation hardness and strength relationship under quasi-static and dynamic testing regimes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 534-539.	2.6	11
105	Laser Wire Deposition of Thick Ti-6Al-4V Buildups: Heat Transfer Model, Microstructure, and Mechanical Properties Evaluations. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 6490-6508.	1.1	11
106	Hard turning multi-performance optimization for improving the surface integrity of 300M ultra-high strength steel. International Journal of Advanced Manufacturing Technology, 2019, 104, 141-157.	1.5	11
107	Turbine Blade Tip Repair by Laser Directed Energy Deposition Additive Manufacturing Using a Rene 142â€“MERL 72 Powder Blend. Journal of Manufacturing and Materials Processing, 2021, 5, 21.	1.0	11
108	Shear punch testing and fracture toughness of bulk nanostructured silver. Materials & Design, 2009, 30, 1445-1450.	5.1	10

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109	Tribology of a Feâ€“Crâ€“B-Based Alloy Coating Fabricated by a Controlled Short-Circuit MIG Welding Process. Metallography, Microstructure, and Analysis, 2013, 2, 223-233.	0.5	10
110	Tribological performance of Alâ€“12Si coatings created via Electrospark Deposition and Spark Plasma Sintering. Tribology International, 2013, 66, 1-11.	3.0	10
111	Grain Refinement during Rapid Solidification of Aluminum–Zirconium Alloys Using Electrospark Deposition. Materials Transactions, 2013, 54, 934-939.	0.4	10
112	Anodized aluminumâ€“silicon alloy counter electrode substrates for next generation solar cell applications. Applied Surface Science, 2015, 356, 317-324.	3.1	10
113	Characterization and investigation of size effect in nano-impact indentations performed using cube-corner indenter tip. Journal of Materials Research, 2017, 32, 2241-2248.	1.2	10
114	Effect of travel speed and sub-Î² transus post deposition heat treatments on thin Ti-6Al-4V laser wire deposits. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 724, 376-384.	2.6	10
115	Microstructure and Mechanical Properties of Ti-6Al-4V Additively Manufactured by Electron Beam Melting with 3D Part Nesting and Powder Reuse Influences. Journal of Manufacturing and Materials Processing, 2022, 6, 21.	1.0	10
116	Determination ofE2for Nitride Ceramics Using FE-SEM and the Duaneâ€“Hunt Limit Procedure. Microscopy and Microanalysis, 2005, 11, 56-65.	0.2	9
117	Linear Friction Welding of IN718 to Ti6Al4V. Materials Science Forum, 2016, 879, 2072-2077.	0.3	9
118	Effect of heat treatment on the microstructure and elevated temperature tensile properties of Rene 41 alloy produced by laser powder bed fusion. Journal of Alloys and Compounds, 2021, 858, 157645.	2.8	9
119	Microstructure and mechanical properties of difficult to weld Rene 77 superalloy produced by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 827, 142053.	2.6	9
120	Laser powder bed fusion of a new high gamma prime Ni-based superalloy with improved weldability. Materials and Design, 2021, 208, 109895.	3.3	9
121	Characterization of the microstructure and mechanical properties of highly textured and single crystal Hastelloy X thin struts fabricated by laser powder bed fusion. Journal of Alloys and Compounds, 2022, 901, 163465.	2.8	9
122	Microstructure and mechanical properties of crack-free Inconel 738 fabricated by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 850, 143524.	2.6	9
123	Recyclability assessment of Al 7075 chips produced by cold comminution and consolidation using spark plasma sintering. Canadian Metallurgical Quarterly, 2016, 55, 94-103.	0.4	8
124	A Mn/Co-oxide electrode for potential use in high energy density hybrid supercapacitors. Materials Chemistry and Physics, 2017, 193, 73-81.	2.0	8
125	Mechanical Properties and Structure of Laser Beam and Wide Gap Brazed Joints Produced Using Mar M247â€“Amdry DF3 Powders. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	0.5	8
126	Microstructure and mechanical properties of Î²-21S Ti alloy fabricated through laser powder bed fusion. Progress in Additive Manufacturing, 2021, 6, 417-430.	2.5	8

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127	Effect of substrate condition on wire fed electron beam additive deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 849, 143448.	2.6	8
128	Crystal structure, transformation and thermal stability of nanostructured 316LSS alloyed with 2 and 6wt.% aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6020-6027.	2.6	7
129	Characterization of Nanostructured and Ultrafine-Grain Aluminum-Silicon Claddings using the Nanoimpact Indentation Technique. Jom, 2013, 65, 763-768.	0.9	7
130	Microstructure Evolution and Rapid Solidification Behavior of Blended Nickel-Based Superalloy Powders Fabricated by Laser Powder Deposition. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 3771-3780.	1.1	7
131	Fractional Crystallization Model of Multicomponent Aluminum Alloys: A Case Study of Aircraft Recycling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1024-1034.	1.0	7
132	Microstructure characterization and grain morphology of alloy 625 with 0.4 wt% boron modification manufactured by laser wire deposition. Additive Manufacturing, 2018, 24, 137-144.	1.7	6
133	Assessment of melting behavior of Cu-coated Ti powders using thermal analysis. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 369, 56-65.	2.6	5
134	Thermal stability and oxidation behavior of Al-containing nanocrystalline powders produced by cryomilling. Journal of Materials Science, 2008, 43, 3452-3458.	1.7	5
135	Microstructural investigation of controlled short circuiting gas metal arc welding deposited aluminiumâ€“lithium alloy. Canadian Metallurgical Quarterly, 2014, 53, 416-422.	0.4	5
136	Thermal Decoating of Aerospace Aluminum Alloys for Aircraft Recycling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 1976-1985.	1.0	5
137	Evaluation of the Particle Bonding for Aluminum Sample Produced by Spark Plasma Sintering. Journal of Materials Engineering and Performance, 2016, 25, 4521-4528.	1.2	5
138	Effect of Platform Temperature and Post-Processing Heat Treatment on the Fatigue Life of Additively Manufactured AlSi7Mg Alloy. Metals, 2021, 11, 679.	1.0	5
139	Crystallographic orientation dependence of Charpy impact behaviours in stainless steel 316L fabricated by laser powder bed fusion. Additive Manufacturing, 2021, 46, 102104.	1.7	5
140	Active Brazing Alloy Produced by Electroless Plating Technique. Ceramic Engineering and Science Proceedings, 0, , 801-808.	0.1	5
141	Analysis of the effect of surface morphology on tensile behavior of LPBF SS316L microstruts. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142226.	2.6	5
142	Benchmarking of 316L Stainless Steel Manufactured by a Hybrid Additive/Subtractive Technology. Journal of Manufacturing and Materials Processing, 2022, 6, 30.	1.0	5
143	Fatigue Crack Propagation Rates and Local Texture Relationship in 2099-T83 Al-Li Alloy. Advanced Materials Research, 0, 409, 9-14.	0.3	4
144	Utilisation of electrospark deposition to restore local oxidation resistance properties in damaged NiCoCrAlY and CoNiCrAlY coatings. Canadian Metallurgical Quarterly, 2012, 51, 313-319.	0.4	4

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145	Modeling residual porosity in thick components consolidated by spark plasma sintering. Scripta Materialia, 2014, 76, 53-56.	2.6	4
146	Microstructure and densification of gas atomised Feâ€“Crâ€“B based alloy powder consolidated by spark plasma sintering. Powder Metallurgy, 2015, 58, 20-29.	0.9	4
147	Interfacial Development of Electrophoretically Deposited Graphene Oxide Films on Al Alloys. Journal of the Electrochemical Society, 2015, 162, D3025-D3029.	1.3	4
148	Effect of Heating Rate on the Pressureless Sintering Densification of a Nickel-Based Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2257-2266.	1.1	4
149	A Comparison of Weldability, Structure, and Mechanical Properties of CM64 and Tribaloy T-800 Welds for Hard-Facing of Turbine Blades. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, .	1.3	4
150	Experimental method for determining densification function of metal powder and its validity. Powder Metallurgy, 2004, 47, 55-59.	0.9	3
151	Combining thermodynamics and DSC to characterize the melting and wetting behavior of a composite powder used for joining ceramics. Journal of Materials Science, 2005, 40, 2443-2447.	1.7	3
152	Electron Beam Freeform Fabrication on Stainless Steel. Materials Science Forum, 2007, 539-543, 4938-4943.	0.3	3
153	Interparticle Liquid Film Formation during Spark Plasma Sintering of Inconel 718 Superalloy. Advanced Materials Research, 0, 409, 763-768.	0.3	3
154	Consideration of particle rearrangement during the modeling of spark plasma densification of Alâ€“Mg alloy powders. Scripta Materialia, 2015, 102, 7-10.	2.6	3
155	Contribution of cellulosic fibre filter on atmosphere moisture content in laser powder bed fusion additive manufacturing. Scientific Reports, 2019, 9, 13794.	1.6	3
156	Fabrication of a composite powder and its application as an active brazing alloy. Journal of Materials Science, 2005, 40, 1485-1493.	1.7	2
157	Formation of Nanostructures and Solid Solubility Extension in Cryomilled Al-Cu and Al-Si Powders. Canadian Metallurgical Quarterly, 2009, 48, 33-44.	0.4	2
158	Autogenous electrospark deposition of NiCoCrAlY. Canadian Metallurgical Quarterly, 2011, 50, 145-152.	0.4	2
159	The Effect of Grain Size on the Cyclic Oxidation of NiCoCrAlY. Jom, 2014, 66, 1088-1095.	0.9	2
160	Development of Titanium-Sputtered Anodized Aluminum Substrates for Dye-Sensitized Solar Cells. Metallurgical and Materials Transactions E, 2014, 1, 311-317.	0.5	2
161	Multi-Objective Build Orientation Optimization for Powder Bed Fusion by Laser. , 2017, , .		2
162	Spark Plasma Sintering and Upsetting of a Gas-Atomized/Air-Atomized Al Alloy Powder Mixture. Journal of Materials Engineering and Performance, 2017, 26, 5097-5106.	1.2	2

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163	Thermal Stability of Cryomilled Al-Mg-Er Powders. Journal of Nanomaterials, 2017, 2017, 1-17.	1.5	2
164	Industrial comminution of different Al scrap. Powder Technology, 2017, 317, 236-246.	2.1	2
165	Fatigue Crack Growth Behavior of 2099-T83 Extrusions in two Different Environments. , 2012, , 517-522.		2
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