# Mathieu Brochu

## List of Publications by Citations



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|---|---|---|---|
| 184 papers | 2,879 citations | 30 h-index | 43 g-index |
| 195 ext. papers | 3,456 ext. citations | 3.7 avg, IF | 5.65 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 184 | Densification and microstructural investigation of Inconel 718 parts fabricated by selective laser melting. *Powder Technology*, **2017**, 310, 60-66 | 5.2 | 141 |
| 183 | Electron beam freeforming of stainless steel using solid wire feed. *Materials & Design*, **2007**, 28, 2278-2286 | | 73 |
| 182 | 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 | 5.3 | 73 |
| 181 | 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 | 5.3 | 71 |
| 180 | Microstructure and mechanical property considerations in additive manufacturing of aluminum alloys. *MRS Bulletin*, **2016**, 41, 745-751 | 3.2 | 69 |
| 179 | Additive Manufacturing of Al-12Si Alloy Via Pulsed Selective Laser Melting. *Jom*, **2015**, 67, 590-596 | 2.1 | 63 |
| 178 | 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 | 5.3 | 61 |
| 177 | Thermal stability and oxidation behavior of nanostructured NiCoCrAlY coatings. *Surface and Coatings Technology*, **2011**, 205, 4162-4168 | 4.4 | 60 |
| 176 | Comparison between barium and strontium-glass composites for sealing SOFCs. *Journal of the European Ceramic Society*, **2006**, 26, 3307-3313 | 6 | 60 |
| 175 | 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 | 5.3 | 54 |
| 174 | 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 | 4.4 | 54 |
| 173 | Additive Manufacturing of AlSi10Mg Alloy Using Direct Energy Deposition: Microstructure and Hardness Characterization. *Journal of Thermal Spray Technology*, **2017**, 26, 587-597 | 2.5 | 53 |
| 172 | Nanocrystalline eutectic Al–Si alloy produced by cryomilling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 508, 43-49 | 5.3 | 52 |
| 171 | Fatigue strength of Al alloy cold sprayed with nanocrystalline powders. *International Journal of Fatigue*, **2014**, 65, 51-57 | 5 | 49 |
| 170 | Formation of amorphous Zr41.2Ti13.8Ni10Cu12.5Be22.5 coatings via the ElectroSpark Deposition process. *Intermetallics*, **2008**, 16, 518-523 | 3.5 | 49 |
| 169 | A Comprehensive Approach to Powder Feedstock Characterization for Powder Bed Fusion Additive Manufacturing: A Case Study on AlSi7Mg. *Materials*, **2018**, 11, | 3.5 | 48 |
| 168 | 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 | 5.3 | 47 |

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| 167 | Characterization of Al–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 | 5.3 | 40 |
| 166 | Solidification pattern, microstructure and texture development in Laser Powder Bed Fusion (LPBF) of Al10SiMg alloy. *Materials Characterization*, **2018**, 145, 29-38 | 3.9 | 39 |
| 165 | Nickel-based superalloy microstructure obtained by pulsed laser powder bed fusion. *Materials Characterization*, **2017**, 131, 306-315 | 3.9 | 39 |
| 164 | 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 | 5.6 | 38 |
| 163 | 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 | 5.3 | 37 |
| 162 | Densification Behavior of 316L Stainless Steel Parts Fabricated by Selective Laser Melting by Variation in Laser Energy Density. *Materials Transactions*, **2016**, 57, 1952-1959 | 1.3 | 36 |
| 161 | Pressureless sintering of cold sprayed Inconel 718 deposit. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 556, 343-350 | 5.3 | 34 |
| 160 | Interfacial morphology development and solute trapping behavior during rapid solidification of an Al–Cu alloy. *Acta Materialia*, **2013**, 61, 1571-1580 | 8.4 | 34 |
| 159 | Pressureless reactive sintering of ZrB2 ceramic. *Journal of the European Ceramic Society*, **2009**, 29, 1493-1499 | 6 | 34 |
| 158 | Characterization of bending vibration fatigue of SLM fabricated Ti-6Al-4V. *International Journal of Fatigue*, **2017**, 99, 25-34 | 5 | 33 |
| 157 | The effect of grain size on the oxidation of NiCoCrAlY. *Applied Surface Science*, **2014**, 301, 258-263 | 6.7 | 33 |
| 156 | Fabrication of Crack-Free Nickel-Based Superalloy Considered Non-Weldable during Laser Powder Bed Fusion. *Materials*, **2018**, 11, | 3.5 | 30 |
| 155 | Multi-Objective Build Orientation Optimization for Powder Bed Fusion by Laser. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2017**, 139, | 3.3 | 30 |
| 154 | Parameters influencing the oxidation behavior of cryomilled CoNiCrAlY. *Surface and Coatings Technology*, **2010**, 205, 2546-2553 | 4.4 | 30 |
| 153 | Brazing silicon nitride to an iron-based intermetallic using a copper interlayer. *Ceramics International*, **2004**, 30, 901-910 | 5.1 | 30 |
| 152 | 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 | 5.3 | 29 |
| 151 | Development of a nanostructure microstructure in the Al–Ni system using the electrospark deposition process. *Journal of Materials Processing Technology*, **2010**, 210, 892-898 | 5.3 | 29 |
| 150 | Characterization of electron beam welded AA2024. *Vacuum*, **2010**, 85, 268-282 | 3.7 | 28 |

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| 149 | Characterization of single crystalline austenitic stainless steel thin struts processed by laser powder bed fusion. *Scripta Materialia*, **2019**, 163, 51-56 | 5.6 | 28 |
| 148 | Microstructure evolution of Inconel 625 with 0.4 wt% boron modification during gas tungsten arc deposition. *Journal of Alloys and Compounds*, **2017**, 694, 429-438 | 5.7 | 26 |
| 147 | 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 | 5.3 | 26 |
| 146 | Cold gas dynamic spraying as a method for freeforming and joining materials. *Surface and Coatings Technology*, **2008**, 202, 2801-2806 | 4.4 | 26 |
| 145 | Comparison Between Micrometer- and Nano-Scale Glass Composites for Sealing Solid Oxide Fuel Cells. *Journal of the American Ceramic Society*, **2006**, 89, 810-816 | 3.8 | 25 |
| 144 | Understanding the solidification and microstructure evolution during CSC-MIG welding of Fe CrB-based alloy. *Materials Characterization*, **2013**, 86, 127-138 | 3.9 | 24 |
| 143 | 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 | 3.8 | 24 |
| 142 | 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 | 5.7 | 23 |
| 141 | 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 | 4.4 | 22 |
| 140 | Titanium Alloy Repair with Wire-Feed Electron Beam Additive Manufacturing Technology. *Advances in Materials Science and Engineering*, **2019**, 2019, 1-23 | 1.5 | 21 |
| 139 | Nanostructured Al-Based Metal Matrix Composite Coating Production by Pulsed Gas Dynamic Spraying Process. *Journal of Thermal Spray Technology*, **2012**, 21, 609-619 | 2.5 | 21 |
| 138 | Dynamic consolidation of nanostructured Al 7.5%Mg alloy powders. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 466, 84-89 | 5.3 | 20 |
| 137 | Ti 6Al 4V electron beam weld qualification using laser scanning confocal microscopy. *Materials Characterization*, **2005**, 54, 254-262 | 3.9 | 20 |
| 136 | Solidification microstructure simulation of Ti-6Al-4V in metal additive manufacturing: A review. *Additive Manufacturing*, **2020**, 31, 100989 | 6.1 | 20 |
| 135 | Spark plasma sintering of an Al-based powder blend. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 621, 18-27 | 5.3 | 19 |
| 134 | Microstructure evolution of Inconel 738 fabricated by pulsed laser powder bed fusion. *Progress in Additive Manufacturing*, **2019**, 4, 97-107 | 5 | 19 |
| 133 | Analysis of WC/Ni-Based Coatings Deposited by Controlled Short-Circuit MIG Welding. *Journal of Materials Engineering and Performance*, **2012**, 21, 865-876 | 1.6 | 19 |
| 132 | Thin Gauge Titanium Manufacturing Using Multiple-Pass Electron Beam Welding. *Materials and Manufacturing Processes*, **2006**, 21, 439-451 | 4.1 | 19 |

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| 131 | Evaluation of Powder Layer Density for the Selective Laser Melting (SLM) Process. *Materials Transactions*, **2017**, 58, 294-297 | 1.3 | 18 |
| 130 | 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 | 5.3 | 18 |
| 129 | Spark plasma sintering of prealloyed aluminium powders. *Powder Metallurgy*, **2015**, 58, 51-60 | 1.9 | 17 |
| 128 | Non-equilibrium solute partitioning in a laser re-melted Al□i□Cu alloy. *Acta Materialia*, **2013**, 61, 7432-7436 | 8.4 | 17 |
| 127 | Transient liquid phase bonding of Cu to Cu□W composite using an electron beam energy source. *International Journal of Refractory Metals and Hard Materials*, **2007**, 25, 67-71 | 4.1 | 17 |
| 126 | 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 | 5.3 | 17 |
| 125 | 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 | 3.8 | 17 |
| 124 | Effect of extrusion aspect ratio and test temperatures on fatigue crack growth behavior of a 2099-T83 Al□i alloy. *International Journal of Fatigue*, **2014**, 59, 244-253 | 5 | 16 |
| 123 | Consolidation of cryomilled Al□Si using spark plasma sintering. *Philosophical Magazine*, **2013**, 93, 2445-2464 | 1.6 | 16 |
| 122 | Microstructures and properties of SLM-manufactured Cu-15Ni-8Sn alloy. *Additive Manufacturing*, **2020**, 31, 100921 | 6.1 | 16 |
| 121 | Formation of nanostructured weldments in the Al□Si system using electrospark welding. *Applied Surface Science*, **2010**, 256, 4009-4016 | 6.7 | 15 |
| 120 | PTLPB of Si3N4 to FA-129 using nickel as a core interlayer. *International Journal of Refractory Metals and Hard Materials*, **2004**, 22, 95-103 | 4.1 | 15 |
| 119 | Analytical fatigue life prediction of shot peened AA 7050-T7451. *International Journal of Fatigue*, **2019**, 118, 271-281 | 5 | 14 |
| 118 | The effect of nanostructure on the oxidation of NiAl. *Intermetallics*, **2014**, 54, 209-217 | 3.5 | 14 |
| 117 | Improving the mechanical reliability of cryomilled Al□Mg alloy using a two-stage spark plasma sintering cycle. *Scripta Materialia*, **2012**, 66, 455-458 | 5.6 | 14 |
| 116 | Interdiffusion between copper and nickel powders and sintering map development during spark plasma sintering. *Scripta Materialia*, **2015**, 100, 74-77 | 5.6 | 14 |
| 115 | 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 | 5.3 | 13 |
| 114 | Pulsed laser powder bed fusion additive manufacturing of A356. *Materials Characterization*, **2018**, 143, 27-33 | 3.9 | 13 |

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| 113 | Spark plasma sintering and age hardening of an Al–Zn–Mg alloy powder blend. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 650, 129-138 | 5.3 | 13 |
| 112 | The effects of applied current on one-dimensional interdiffusion between copper and nickel in spark plasma sintering. *Journal of Applied Physics*, **2014**, 116, 154901 | 2.5 | 13 |
| 111 | Selective laser sintering of composite copper–tin powders. *Journal of Materials Research*, **2014**, 29, 1997-2005 | 2.5 | 13 |
| 110 | Solid freeform fabrication of Al–Si components via the CSC-MIG process. *Canadian Metallurgical Quarterly*, **2012**, 51, 302-312 | 0.9 | 12 |
| 109 | Effect of heat treatments on microstructure evolution and grain morphology of alloy 625 with 0.4 wt% boron modification fabricated by laser wire deposition. *Journal of Alloys and Compounds*, **2018**, 764, 815-823 | 5.7 | 11 |
| 108 | Cladding AA7075 with a cryomilled Al–12Si alloy using spark plasma sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 578, 323-330 | 5.3 | 11 |
| 107 | Microstructure and Tribology of Spark Plasma Sintered Fe–Cr–B Metamorphic Alloy Powder. *Tribology Letters*, **2011**, 44, 269-278 | 2.8 | 11 |
| 106 | Bulk nanostructure and amorphous metallic components using the electrospark welding process. *Assembly Automation*, **2010**, 30, 248-256 | 2.1 | 11 |
| 105 | Microstructure and mechanical behavior of as-built and heat-treated Ti–Al–Nb produced by laser powder bed fusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 793, 139978 | 5.3 | 11 |
| 104 | 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 | 5.7 | 11 |
| 103 | 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 | 5.3 | 10 |
| 102 | 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 | 5.3 | 10 |
| 101 | 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 | 5 | 10 |
| 100 | Supersolidus Liquid Phase Sintering Modeling of Inconel 718 Superalloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 869-876 | 2.3 | 10 |
| 99 | Tribology of a Fe–Cr–B-Based Alloy Coating Fabricated by a Controlled Short-Circuit MIG Welding Process. *Metallography, Microstructure, and Analysis*, **2013**, 2, 223-233 | 1.1 | 10 |
| 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 | 5.3 | 10 |
| 97 | Shear punch testing and fracture toughness of bulk nanostructured silver. *Materials & Design*, **2009**, 30, 1445-1450 | | 10 |
| 96 | Thermal simulation of HAZ regions in modern high strength steel. *Canadian Metallurgical Quarterly*, **2012**, 51, 58-66 | 0.9 | 10 |

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| 95 | Wetting behaviour of copper on an iron aluminide alloy. *Intermetallics*, **2004**, 12, 289-294 | 3.5 | 10 |
| 94 | 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 | 5.3 | 10 |
| 93 | Characterization and investigation of size effect in nano-impact indentations performed using cube-corner indenter tip. *Journal of Materials Research*, **2017**, 32, 2241-2248 | 2.5 | 9 |
| 92 | Characterization of bending vibration fatigue of WBD fabricated Ti-6Al-4V. *International Journal of Fatigue*, **2017**, 101, 36-44 | 5 | 9 |
| 91 | 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 | 3.2 | 9 |
| 90 | Anodized aluminum□silicon alloy counter electrode substrates for next generation solar cell applications. *Applied Surface Science*, **2015**, 356, 317-324 | 6.7 | 9 |
| 89 | Investigation of the rotating drum technique to characterise powder flow in controlled and low pressure environments. *Powder Technology*, **2020**, 366, 925-937 | 5.2 | 9 |
| 88 | Linear Friction Welding of IN718 to Ti6Al4V. *Materials Science Forum*, **2016**, 879, 2072-2077 | 0.4 | 9 |
| 87 | Comparison of small and long fatigue crack growth behavior in AA 7050-T7451. *Engineering Fracture Mechanics*, **2018**, 202, 20-32 | 4.2 | 9 |
| 86 | 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 | 1.5 | 8 |
| 85 | Single-crystalline-like stainless steel 316L with different geometries fabricated by laser powder bed fusion. *Progress in Additive Manufacturing*, **2020**, 5, 41-49 | 5 | 8 |
| 84 | Grain Refinement during Rapid Solidification of Aluminum–Zirconium Alloys Using Electrospark Deposition. *Materials Transactions*, **2013**, 54, 934-939 | 1.3 | 8 |
| 83 | Electron beam freeforming on type 321 stainless steel using BNi-2 brazing paste. *Materials Science and Technology*, **2005**, 21, 613-618 | 1.5 | 8 |
| 82 | Development of Metastable Solidification Structures Using the Electrospark Deposition Process. *The Open Surface Science Journal*, **2010**, 3, 105-114 | | 8 |
| 81 | 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 | 2.3 | 8 |
| 80 | Mechanical Properties and Structure of Laser Beam and Wide Gap Brazed Joints Produced Using Mar M247□amdry DF3 Powders. *Journal of Engineering for Gas Turbines and Power*, **2019**, 141, | 1.7 | 7 |
| 79 | Effect of travel speed and sub-□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 | 5.3 | 7 |
| 78 | 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 | 2.3 | 7 |

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| 77 | Determination of E2 for nitride ceramics using FE-SEM and the Duane-Hunt limit procedure. *Microscopy and Microanalysis*, **2005**, 11, 56-65 | 0.5 | 7 |
| 76 | 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 | 5 | 7 |
| 75 | A Mn/Co-oxide electrode for potential use in high energy density hybrid supercapacitors. *Materials Chemistry and Physics*, **2017**, 193, 73-81 | 4.4 | 6 |
| 74 | Impact properties of half stress-relieved and hot isostatic pressed Ti6Al4V components fabricated by laser powder bed fusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 760, 481-488 | 5.3 | 6 |
| 73 | 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 | 5.3 | 6 |
| 72 | Characterization of Nanostructured and Ultrafine-Grain Aluminum-Silicon Claddings using the Nanoimpact Indentation Technique. *Jom*, **2013**, 65, 763-768 | 2.1 | 6 |
| 71 | Tribological performance of Al12Si coatings created via Electrospark Deposition and Spark Plasma Sintering. *Tribology International*, **2013**, 66, 1-11 | 4.9 | 6 |
| 70 | 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 | 5.3 | 6 |
| 69 | 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 | 6.1 | 6 |
| 68 | Thermal stability and oxidation behavior of Al-containing nanocrystalline powders produced by cryomilling. *Journal of Materials Science*, **2008**, 43, 3452-3458 | 4.3 | 5 |
| 67 | 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 | 5.3 | 5 |
| 66 | Machine Learning-Enabled Competitive Grain Growth Behavior Study in Directed Energy Deposition Fabricated Ti6Al4V. *Jom*, **2020**, 72, 458-464 | 2.1 | 5 |
| 65 | Evaluation of the Particle Bonding for Aluminum Sample Produced by Spark Plasma Sintering. *Journal of Materials Engineering and Performance*, **2016**, 25, 4521-4528 | 1.6 | 5 |
| 64 | Surface, microstructure, and tensile deformation characterization of LPBF SS316L microstruts micromachined with femtosecond laser. *Materials and Design*, **2021**, 210, 110045 | 8.1 | 5 |
| 63 | Active Brazing Alloy Produced by Electroless Plating Technique. *Ceramic Engineering and Science Proceedings*,801-808 | 0.1 | 5 |
| 62 | 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 | 2.5 | 4 |
| 61 | Interfacial Development of Electrophoretically Deposited Graphene Oxide Films on Al Alloys. *Journal of the Electrochemical Society*, **2015**, 162, D3025-D3029 | 3.9 | 4 |
| 60 | Modeling residual porosity in thick components consolidated by spark plasma sintering. *Scripta Materialia*, **2014**, 76, 53-56 | 5.6 | 4 |

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| 59 | Fatigue Crack Propagation Rates and Local Texture Relationship in 2099-T83 Al-Li Alloy. *Advanced Materials Research*, **2011**, 409, 9-14 | 0.5 | 4 |
| 58 | Turbine Blade Tip Repair by Laser Directed Energy Deposition Additive Manufacturing Using a Rene 142 MERL 72 Powder Blend. *Journal of Manufacturing and Materials Processing*, **2021**, 5, 21 | 2.2 | 4 |
| 57 | Thermo-Mechanical Modeling of Wire-Fed Electron Beam Additive Manufacturing. *Materials*, **2021**, 14, | 3.5 | 4 |
| 56 | Consideration of particle rearrangement during the modeling of spark plasma densification of Al Mg alloy powders. *Scripta Materialia*, **2015**, 102, 7-10 | 5.6 | 3 |
| 55 | Recyclability assessment of Al 7075 chips produced by cold comminution and consolidation using spark plasma sintering. *Canadian Metallurgical Quarterly*, **2016**, 55, 94-103 | 0.9 | 3 |
| 54 | Microstructural investigation of controlled short circuiting gas metal arc welding deposited aluminium thium alloy. *Canadian Metallurgical Quarterly*, **2014**, 53, 416-422 | 0.9 | 3 |
| 53 | Utilisation of electrospark deposition to restore local oxidation resistance properties in damaged NiCoCrAlY and CoNiCrAlY coatings. *Canadian Metallurgical Quarterly*, **2012**, 51, 313-319 | 0.9 | 3 |
| 52 | Electron Beam Freeform Fabrication on Stainless Steel. *Materials Science Forum*, **2007**, 539-543, 4938-4943 | 0.4 | 3 |
| 51 | Evaluation of Maraging Steel Produced Using Hybrid Additive/Subtractive Manufacturing. *Journal of Manufacturing and Materials Processing*, **2021**, 5, 107 | 2.2 | 3 |
| 50 | 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 | 2.3 | 3 |
| 49 | Contribution of cellulosic fibre filter on atmosphere moisture content in laser powder bed fusion additive manufacturing. *Scientific Reports*, **2019**, 9, 13794 | 4.9 | 2 |
| 48 | Multi-Objective Build Orientation Optimization for Powder Bed Fusion by Laser **2017**, | | 2 |
| 47 | Microstructure and densification of gas atomised Fe CrB based alloy powder consolidated by spark plasma sintering. *Powder Metallurgy*, **2015**, 58, 20-29 | 1.9 | 2 |
| 46 | Autogenous electrospark deposition of NiCoCrAlY. *Canadian Metallurgical Quarterly*, **2011**, 50, 145-152 | 0.9 | 2 |
| 45 | Formation of Nanostructures and Solid Solubility Extension in Cryomilled Al-Cu and Al-Si Powders. *Canadian Metallurgical Quarterly*, **2009**, 48, 33-44 | 0.9 | 2 |
| 44 | Fabrication of a composite powder and its application as an active brazing alloy. *Journal of Materials Science*, **2005**, 40, 1485-1493 | 4.3 | 2 |
| 43 | 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 | 4.3 | 2 |
| 42 | 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, | 3.3 | 2 |

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| 41 | Effects of crystallographic orientation on the corrosion behavior of stainless steel 316L manufactured by laser powder bed fusion. *Corrosion Science*, **2022**, 196, 110009 | 6.8 | 2 |
| 40 | Industrial comminution of different Al scrap. *Powder Technology*, **2017**, 317, 236-246 | 5.2 | 2 |
| 39 | Thermal Stability of Cryomilled Al-Mg-Er Powders. *Journal of Nanomaterials*, **2017**, 2017, 1-17 | 3.2 | 1 |
| 38 | The Effect of Grain Size on the Cyclic Oxidation of NiCoCrAlY. *Jom*, **2014**, 66, 1088-1095 | 2.1 | 1 |
| 37 | 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 | 1.6 | 1 |
| 36 | Interparticle Liquid Film Formation during Spark Plasma Sintering of Inconel 718 Superalloy. *Advanced Materials Research*, **2011**, 409, 763-768 | 0.5 | 1 |
| 35 | Application of Electroless Coating for Processing and Joining of Advanced Materials. *Materials Science Forum*, **2003**, 426-432, 2491-2496 | 0.4 | 1 |
| 34 | 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 | 2.2 | 1 |
| 33 | 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 | 5.7 | 1 |
| 32 | Fatigue Crack Growth Behavior of 2099-T83 Extrusions in two Different Environments **2012**, 517-522 | | 1 |
| 31 | Thermal Decoating of Aerospace Aluminum Alloys for Aircraft Recycling. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2016**, 47, 1976-1985 | 2.5 | 1 |
| 30 | 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 | 5.7 | 1 |
| 29 | Advanced Welding Materials and Technologies for Repair of Turbine Engine Components Manufactured of High Gamma Prime Nickel Based Superalloys **2018**, | | 1 |
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