

# Ian Baker

## List of Publications by Year in descending order

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325  
papers

9,546  
citations

50170

46  
h-index

58464

82  
g-index

337  
all docs

337  
docs citations

337  
times ranked

6844  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Global warming releases microplastic legacy frozen in Arctic Sea ice. <i>Earth's Future</i> , 2014, 2, 315-320.  | 2.4 | 720       |
| 2  | The effect of interstitial carbon on the mechanical properties and dislocation substructure evolution in Fe <sub>40.4</sub> Ni <sub>11.3</sub> Mn <sub>34.8</sub> Al <sub>7.5</sub> Cr <sub>6</sub> high entropy alloys. <i>Acta Materialia</i> , 2016, 120, 228-239.                      | 3.8 | 373       |
| 3  | An assessment on the future development of high-entropy alloys: Summary from a recent workshop. <i>Intermetallics</i> , 2015, 66, 67-76.   | 1.8 | 355       |
| 4  | MAGNETIC NANOPARTICLE HYPERTHERMIA IN CANCER TREATMENT. <i>Nano LIFE</i> , 2010, 01, 17-32.  | 0.6 | 295       |
| 5  | Effect of cooling rate on hardness of FeAl and NiAl. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1990, 21, 2281-2282.  | 1.4 | 210       |
| 6  | Grain boundary accommodation of slip in Ni <sub>3</sub> Al containing boron. <i>Acta Metallurgica</i> , 1986, 34, 1395-1399.   | 2.1 | 205       |
| 7  | The effect of carbon on the microstructures, mechanical properties, and deformation mechanisms of thermo-mechanically treated Fe <sub>40.4</sub> Ni <sub>11.3</sub> Mn <sub>34.8</sub> Al <sub>7.5</sub> Cr <sub>6</sub> high entropy alloys. <i>Acta Materialia</i> , 2017, 126, 346-360. | 3.8 | 200       |
| 8  | Mechanical properties of FeAl. <i>International Materials Reviews</i> , 1997, 42, 181-205.   | 9.4 | 180       |
| 9  | A review of the mechanical properties of B <sub>2</sub> compounds. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995, 192-193, 1-13.  | 2.6 | 156       |
| 10 | Structural and magnetic properties of nanostructured Mn-Fe-C magnetic materials. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 308, 214-226.  | 1.0 | 139       |
| 11 | Flow and fracture of Fe-Al. <i>Materials Science and Engineering</i> , 1987, 96, 147-158.  | 0.1 | 126       |
| 12 | Climate change and forest fires synergistically drive widespread melt events of the Greenland Ice Sheet. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 7964-7967.  | 3.3 | 122       |
| 13 | Interstitial strengthening of a f.c.c. FeNiMnAlCr high entropy alloy. <i>Materials Letters</i> , 2016, 180, 153-156.   | 1.3 | 107       |
| 14 | The effect of grain size on the yield strength of FeAl and NiAl. <i>Acta Metallurgica Et Materialia</i> , 1991, 39, 1637-1644.   | 1.9 | 104       |
| 15 | Contact temperatures and their influence on wear during pin-on-disk tribotesting. <i>Tribology International</i> , 2015, 82, 534-542.  | 3.0 | 98        |
| 16 | Surface engineering of core/shell iron/iron oxide nanoparticles from microemulsions for hyperthermia. <i>Materials Science and Engineering C</i> , 2010, 30, 92-97.  | 3.8 | 97        |
| 17 | The effect of boron on the chemistry of grain boundaries in stoichiometric Ni <sub>3</sub> Al. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1988, 57, 379-385.                                   | 0.6 | 92        |
| 18 | Magnetic properties and thermal ordering of mechanically alloyed Fe <sub>40</sub> at% Al. <i>Intermetallics</i> , 2006, 14, 396-405.   | 1.8 | 85        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | A model for the yield strength anomaly of Fe-Al. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1998, 77, 737-750.   | 0.8 | 84        |
| 20 | Towards an integrated materials characterization toolbox. Journal of Materials Research, 2011, 26, 1341-1383.  | 1.2 | 84        |
| 21 | Heat deposition in iron oxide and iron nanoparticles for localized hyperthermia. Journal of Applied Physics, 2006, 99, 08H106.   | 1.1 | 79        |
| 22 | Recrystallization of a novel two-phase FeNiMnAlCr high entropy alloy. Journal of Alloys and Compounds, 2016, 656, 458-464.   | 2.8 | 76        |
| 23 | Eutectic/eutectoid multi-principle component alloys: A review. Materials Characterization, 2019, 147, 545-557.   | 1.9 | 76        |
| 24 | Dislocation-grain boundary interactions in ice crystals. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 71, 15-42.   | 0.8 | 75        |
| 25 | The influence of vacancy concentration on the mechanical behavior of Fe-40Al. Intermetallics, 1998, 6, 167-175.  | 1.8 | 71        |
| 26 | Observation of impurities in ice. Microscopy Research and Technique, 2001, 55, 198-207.  | 1.2 | 70        |
| 27 | Magnetic nanoparticles with high specific absorption rate of electromagnetic energy at low field strength for hyperthermia therapy. Journal of Applied Physics, 2015, 117, 094302.   | 1.1 | 69        |
| 28 | The effect of boron on the lattice properties of Ni3Al. Acta Metallurgica, 1988, 36, 493-499.  | 2.1 | 66        |
| 29 | The temperature dependence of the flow and fracture of Fe-40Al. Scripta Metallurgica Et Materialia, 1993, 28, 1411-1416.   | 1.0 | 66        |
| 30 | Making EBSD on water ice routine. Journal of Microscopy, 2015, 259, 237-256.   | 0.8 | 64        |
| 31 | Room temperature deformation behavior of multiphase Ni <sub>20</sub> at.%Al <sub>30</sub> at.%Fe and its constituent phases. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 131, 27-37. | 2.6 | 63        |
| 32 | Observation of $\sim 001$ dislocations and a mechanism for transgranular fracture on {001} in FeAl. Acta Metallurgica Et Materialia, 1991, 39, 1011-1017.  | 1.9 | 62        |
| 33 | The effect of temperature and Fe: Al ratio on the flow and fracture of FeAl. Acta Metallurgica Et Materialia, 1995, 43, 1723-1730.   | 1.9 | 62        |
| 34 | Nitriding of a high entropy FeNiMnAlCr alloy. Journal of Alloys and Compounds, 2015, 645, 376-381.   | 2.8 | 61        |
| 35 | Dry sliding wear of NiAl. Wear, 1996, 192, 241-247.  | 1.5 | 60        |
| 36 | On the mechanism of the paramagnetic-to-ferromagnetic transition in Fe-Al. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 449-461.                       | 0.6 | 58        |

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|----|---|-----|-----------|
| 37 | Accelerated precipitation in the AFA stainless steel Fe-20Cr-30Ni-2Nb-5Al via cold working. <i>Intermetallics</i> , 2014, 53, 120-128.  | 1.8 | 57        |
| 38 | The microstructural location of impurities in ice. <i>Canadian Journal of Physics</i> , 2003, 81, 1-9.  | 0.4 | 55        |
| 39 | Effect of Ti content on the microstructure and mechanical behavior of (Fe <sub>36</sub> Ni <sub>18</sub> Mn <sub>33</sub> Al <sub>13</sub> ) <sub>100-x</sub> Ti <sub>x</sub> high entropy alloys. <i>Intermetallics</i> , 2016, 75, 79-87.                                   | 1.8 | 54        |
| 40 | Selective laser melted AlSi10Mg alloy under melting mode transition: Microstructure evolution, nanomechanical behaviors and tensile properties. <i>Journal of Alloys and Compounds</i> , 2021, 873, 159823.   | 2.8 | 54        |
| 41 | The effect of strain rate on the room-temperature ductility of FeAl. <i>Scripta Metallurgica Et Materialia</i> , 1991, 25, 2577-2580.   | 1.0 | 53        |
| 42 | Dynamic observations of dislocation generation at grain boundaries in ice. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1993, 67, 1261-1276.  | 0.8 | 53        |
| 43 | Microstructure and Magnetic Properties of Bulk Nanocrystalline MnAl. <i>Metals</i> , 2014, 4, 20-27.  | 1.0 | 49        |
| 44 | Impact of physical properties and accumulation rate on pore close-off in layered firn. <i>Cryosphere</i> , 2014, 8, 91-105.   | 1.5 | 49        |
| 45 | The microstructure of extruded Fe-Al. <i>Journal of Materials Science</i> , 1989, 24, 4246-4252.  | 1.7 | 48        |
| 46 | Recovery, recrystallization and grain growth in ordered alloys. <i>Intermetallics</i> , 2000, 8, 1183-1196.   | 1.8 | 48        |
| 47 | Fe-Fe oxide nanocomposite particles with large specific absorption rate for hyperthermia. <i>Applied Physics Letters</i> , 2007, 90, 233112.  | 1.5 | 48        |
| 48 | Nanostructured Mn-Al permanent magnets produced by mechanical milling. <i>Journal of Applied Physics</i> , 2006, 99, 08E902.  | 1.1 | 46        |
| 49 | Effects of environment on the sliding tribological behaviors of Zr-based bulk metallic glass. <i>Intermetallics</i> , 2012, 25, 115-125.  | 1.8 | 46        |
| 50 | The effect of aging on the microstructure and mechanical behavior of the alumina-forming austenitic stainless steel Fe-20Cr-30Ni-2Nb-5Al. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 627, 270-276. | 2.6 | 46        |
| 51 | The Structure of Extruded NiAl. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1984, 15, 1129-1136.   | 1.1 | 45        |
| 52 | The effects of both deviation from stoichiometry and boron on grain boundaries in Ni <sub>3</sub> Al. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1990, 62, 659-676.               | 0.6 | 45        |
| 53 | Long range order and defect concentrations in NiAl and CoAl. <i>Acta Metallurgica Et Materialia</i> , 1994, 42, 1535-1540.  | 1.9 | 45        |
| 54 | A new high-strength spinodal alloy. <i>Journal of Materials Research</i> , 2005, 20, 791-795.   | 1.2 | 45        |

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|----|---|-----|-----------|
| 55 | Using electron backscatter diffraction patterns to examine recrystallization in polar ice sheets. <i>Journal of Glaciology</i> , 2006, 52, 546-557.   | 1.1 | 45        |
| 56 | The Effect of Temperature on Dislocation Structures in Ni <sub>3</sub> Al. <i>Physica Status Solidi A</i> , 1985, 89, 163-172.  | 1.7 | 44        |
| 57 | The room temperature strengthening effect of boron as a function of aluminum concentration in FeAl. <i>Intermetallics</i> , 1998, 6, 177-183.   | 1.8 | 44        |
| 58 | Tribological studies of a Zr-based bulk metallic glass. <i>Intermetallics</i> , 2013, 35, 25-32.  | 1.8 | 44        |
| 59 | Microband induced plasticity and the temperature dependence of the mechanical properties of a carbon-doped FeNiMnAlCr high entropy alloy. <i>Materials Characterization</i> , 2018, 139, 373-381.   | 1.9 | 44        |
| 60 | On the room-temperature deformation mechanisms of lamellar-structured Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>35</sub> Al <sub>15</sub> . <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 3998-4008.           | 2.6 | 42        |
| 61 | Microstructural evolution of fine-grained layers through the firn column at Summit, Greenland. <i>Journal of Glaciology</i> , 2011, 57, 755-762.  | 1.1 | 42        |
| 62 | Effects of boron and grain size on the strain-rate sensitivity of Fe-45Al. <i>Scripta Metallurgica Et Materialia</i> , 1994, 30, 863-868.   | 1.0 | 41        |
| 63 | A comparison of <i>in situ</i> MnAl particulates produced via different routes. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 064201.  | 0.7 | 41        |
| 64 | Interstitials in f.c.c. High Entropy Alloys. <i>Metals</i> , 2020, 10, 695.   | 1.0 | 41        |
| 65 | On Intrinsic Stacking Faults in Polycrystalline Ni <sub>3</sub> Al. <i>Physica Status Solidi A</i> , 1984, 85, 481-490.   | 1.7 | 40        |
| 66 | Displacement Fringes in FeAl. <i>Physica Status Solidi A</i> , 1986, 96, 185-190.   | 1.7 | 40        |
| 67 | The effects of chromium on the microstructure and tensile behavior of Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>35</sub> Al <sub>15</sub> . <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 586, 45-52.               | 2.6 | 40        |
| 68 | Slip-plane disordering in stoichiometric Ni <sub>3</sub> Al. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1991, 63, 319-335.  | 0.8 | 39        |
| 69 | The chemistry of grain boundaries in Greenland ice. <i>Journal of Glaciology</i> , 2000, 46, 703-706.   | 1.1 | 39        |
| 70 | Determining the orientations of ice crystals using electron backscatter patterns. <i>Microscopy Research and Technique</i> , 2004, 63, 183-187.   | 1.2 | 39        |
| 71 | Effects of annealing and thermo-mechanical treatment on the microstructures and mechanical properties of a carbon-doped FeNiMnAl multi-component alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 693, 101-110. | 2.6 | 39        |
| 72 | Room temperature tensile ductility in polycrystalline B2 Ni-30Al-20Fe. <i>Scripta Metallurgica</i> , 1989, 23, 897-900.   | 1.2 | 38        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Evolution of individual snowflakes during metamorphism. <i>Journal of Geophysical Research</i> , 2010, 115, .   | 3.3 | 38        |
| 74 | Effect of melting modes on microstructure and tribological properties of selective laser melted AlSi10Mg alloy. <i>Virtual and Physical Prototyping</i> , 2020, 15, 570-582.  | 5.3 | 38        |
| 75 | Formation of L12-structured Ni <sub>3</sub> Si. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1993, 24, 283-292.  | 1.4 | 37        |
| 76 | Microstructure and room-temperature mechanical properties of Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>35</sub> Al <sub>15</sub> . <i>Materials Characterization</i> , 2008, 59, 1546-1549.                               | 1.9 | 36        |
| 77 | The strength and ductility of Ni <sub>3</sub> Si. <i>Acta Metallurgica Et Materialia</i> , 1990, 38, 207-213.   | 1.9 | 35        |
| 78 | Ternary atom site location in L12-structured intermetallic compounds. <i>Journal of Materials Research</i> , 1991, 6, 943-949.  | 1.2 | 34        |
| 79 | Effect of chromium on the environmental sensitivity of FeAl at room temperature. <i>Scripta Metallurgica Et Materialia</i> , 1992, 27, 1823-1828.   | 1.0 | 34        |
| 80 | Observation of the microstructural evolution of snow under uniaxial compression using X-ray computed microtomography. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 12,371.                          | 1.2 | 34        |
| 81 | Lamellar coarsening in Fe <sub>28</sub> Ni <sub>18</sub> Mn <sub>33</sub> Al <sub>21</sub> and its influence on room temperature tensile behavior. <i>Acta Materialia</i> , 2015, 95, 124-131.                            | 3.8 | 34        |
| 82 | Magnetic Nanoparticle-Based Immunoassays-on-a-Chip: Materials Synthesis, Surface Functionalization, and Cancer Cell Screening. <i>Advanced Functional Materials</i> , 2016, 26, 3953-3972.                                | 7.8 | 34        |
| 83 | Thermally induced dislocation loops in polycrystalline ice. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1995, 71, 1-14.                                  | 0.8 | 33        |
| 84 | Characterization of high-strength high-nitrogen austenitic stainless steel synthesized from nitrided powders by spark plasma sintering. <i>Materials Characterization</i> , 2019, 152, 76-84.                             | 1.9 | 33        |
| 85 | Boron-induced grain boundary accommodation of slip in Ni <sub>3</sub> Al. <i>Scripta Metallurgica</i> , 1985, 19, 1497-1498.  | 1.2 | 32        |
| 86 | Evolution of the microstructure and mechanical properties of eutectic Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>35</sub> Al <sub>15</sub> . <i>Journal of Materials Science</i> , 2011, 46, 2009-2017.                    | 1.7 | 31        |
| 87 | Superior strength-ductility synergy in a novel tailored nanoparticles-strengthened medium-entropy alloy. <i>Scripta Materialia</i> , 2022, 207, 114278.   | 2.6 | 31        |
| 88 | Effect of accelerating voltage on planar and axial channeling in ordered intermetallic compounds. <i>Journal of Materials Research</i> , 1992, 7, 2119-2125.  | 1.2 | 30        |
| 89 | Imaging brine and air inclusions in sea ice using micro-X-ray computed tomography. <i>Journal of Glaciology</i> , 2009, 55, 1113-1115.  | 1.1 | 30        |
| 90 | Precipitation kinetics during aging of an alumina-forming austenitic stainless steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 667, 147-155. | 2.6 | 30        |

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|-----|--|-----|-----------|
| 91  | Microstructure, mechanical properties and wear of Ni-Al-Fe alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 325, 1-8.           | 2.6 | 29        |
| 92  | Dry sliding tribological behavior of Zr-based bulk metallic glass. Transactions of Nonferrous Metals Society of China, 2012, 22, 585-589.  | 1.7 | 29        |
| 93  | Directional annealing of cold-rolled copper single crystals. Acta Materialia, 2002, 50, 805-813.   | 3.8 | 28        |
| 94  | The effect of hot zone velocity and temperature gradient on the directional recrystallization of polycrystalline nickel. Acta Materialia, 2002, 50, 4491-4497.                                   | 3.8 | 28        |
| 95  | <i>In situ</i> straining of Fe-Al in a transmission electron microscope. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1993, 67, 479-489. | 0.8 | 27        |
| 96  | SEM/EDS observations of impurities in polar ice: artifacts or not?. Journal of Glaciology, 2003, 49, 184-190.  | 1.1 | 27        |
| 97  | An EBSP study of directionally recrystallized cold-rolled nickel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 392, 8-22.           | 2.6 | 27        |
| 98  | The microstructure of meteoric ice from Vostok, Antarctica. Journal of Glaciology, 2007, 53, 41-62.  | 1.1 | 27        |
| 99  | Microstructural evolution of spinodally formed Fe <sub>35</sub> Ni <sub>15</sub> Mn <sub>25</sub> Al <sub>25</sub> . Intermetallics, 2009, 17, 886-893.  | 1.8 | 27        |
| 100 | Control of grain boundary character distribution and its effects on the deformation of Fe-6.5 wt.% Si. Journal of Alloys and Compounds, 2015, 639, 40-44.  | 2.8 | 27        |
| 101 | Direct versus indirect particle strengthening in a strong, ductile FeNiMnAlTi high entropy alloy. Materials Characterization, 2017, 132, 156-161.  | 1.9 | 27        |
| 102 | Effect of boron and carbon addition on microstructure and mechanical properties of the aged gamma-prime strengthened alumina-forming austenitic alloys. Intermetallics, 2017, 90, 36-49.         | 1.8 | 26        |
| 103 | Improving the ductility of intermetallic compounds by particle-induced slip homogenization. Scripta Materialia, 1999, 41, 409-414.   | 2.6 | 25        |
| 104 | Microstructural evolution during directional annealing. Acta Materialia, 2002, 50, 3347-3359.  | 3.8 | 25        |
| 105 | SEM/EDS comparison of polar and seasonal temperate ice. Microscopy Research and Technique, 2003, 62, 49-61.  | 1.2 | 25        |
| 106 | Magnetic Nanoparticles with High Specific Absorption Rate at Low Alternating Magnetic Field. Nano LIFE, 2015, 05, 1550002.   | 0.6 | 25        |
| 107 | Effect of fine second phase particles on deformation structure in cold rolled copper single crystals. Metal Science, 1983, 17, 459-468.  | 0.7 | 24        |
| 108 | The effect of annealing on Ni-Al-Fe B2 compounds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1992, 152, 258-263.                        | 2.6 | 24        |

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|-----|--|-----|-----------|
| 109 | Experiments and simulations of directionally annealed ODS MA 754. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 492, 353-363.  | 2.6 | 24        |
| 110 | Effect of Al content on the microstructure and mechanical behavior of two-phase FeNiMnAl alloys. <i>Journal of Materials Science</i> , 2014, 49, 1973-1983.  | 1.7 | 24        |
| 111 | Observation of sulfate crystallites in Vostok accretion ice. <i>Materials Characterization</i> , 2002, 48, 263-269.  | 1.9 | 23        |
| 112 | Investigating the thermophysical properties of the ice-snow interface under a controlled temperature gradient. <i>Cold Regions Science and Technology</i> , 2015, 120, 157-167.  | 1.6 | 23        |
| 113 | The effects of carbon on the phase stability and mechanical properties of heat-treated FeNiMnCrAl high entropy alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 748, 59-73. | 2.6 | 23        |
| 114 | The effect of grain size on the stored energy of cold work as a function of strain for polycrystalline nickel. <i>Scripta Metallurgica Et Materialia</i> , 1995, 32, 167-171.  | 1.0 | 22        |
| 115 | On the yield stress anomaly in stoichiometric FeAl. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997, 239-240, 109-117.  | 2.6 | 22        |
| 116 | The paramagnetic-to-ferromagnetic transition in B2-structured Fe-Al single crystals: Experiments and calculations. <i>Philosophical Magazine</i> , 2003, 83, 295-313.  | 0.7 | 22        |
| 117 | Microemulsion Synthesis of Iron Core/Iron Oxide Shell Magnetic Nanoparticles and Their Physicochemical Properties. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1416, 61.  | 0.1 | 22        |
| 118 | Effects of environment on dry sliding wear of powder metallurgical Ti-47Al-2Cr-2Nb-0.2W. <i>Intermetallics</i> , 2014, 53, 10-19.  | 1.8 | 22        |
| 119 | High temperature deformation of Laves phase precipitates in alumina-forming austenitic stainless steels. <i>Materials Letters</i> , 2017, 195, 108-111.  | 1.3 | 22        |
| 120 | Preliminary creep testing of the alumina-forming austenitic stainless steel Fe-20Cr-30Ni-2Nb-5Al. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 718, 492-498.                    | 2.6 | 22        |
| 121 | Elevated temperature deformation behaviour of multi-phase Ni-20 at % Al-30 at % Fe and its constituent phases. <i>Journal of Materials Science</i> , 1996, 31, 4055-4065.  | 1.7 | 21        |
| 122 | Identification of a calcium phosphoserine coordination network in an adhesive organo-apatitic bone cement system. <i>Acta Biomaterialia</i> , 2020, 105, 280-289.  | 4.1 | 21        |
| 123 | Annealing Studies of B2 FeAl. <i>Materials Research Society Symposia Proceedings</i> , 1988, 133, 755.   | 0.1 | 20        |
| 124 | The orientation dependence of the strength of ice single crystals. <i>Journal of Glaciology</i> , 2000, 46, 41-44.   | 1.1 | 20        |
| 125 | The structure and mechanical properties of Fe <sub>2</sub> AlMn single crystals. <i>Philosophical Magazine</i> , 2004, 84, 3169-3194.  | 0.7 | 20        |
| 126 | Creep of granular ice with and without dispersed particles. <i>Journal of Glaciology</i> , 2005, 51, 210-218.  | 1.1 | 20        |



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|-----|---|------|-----------|
| 127 | The effect of thermo-mechanical treatment on the high temperature tensile behavior of an alumina-forming austenitic steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 651, 795-804.          | 2.6  | 20        |
| 128 | The effect of environment and strain rate on the room temperature tensile properties of FeAl single crystals. <i>Intermetallics</i> , 2001, 9, 57-65.   | 1.8  | 19        |
| 129 | The structure and chemistry of 94 m Greenland Ice Sheet Project 2 ice. <i>Annals of Glaciology</i> , 2002, 35, 224-230.   | 2.8  | 19        |
| 130 | Cryogenic EBSD reveals structure of directionally solidified ice-polymer composite. <i>Materials Characterization</i> , 2014, 93, 184-190.  | 1.9  | 19        |
| 131 | Manganese-based permanent magnet materials. <i>Progress in Materials Science</i> , 2022, 124, 100872.   | 16.0 | 19        |
| 132 | Mechanical properties of FeAl. <i>International Materials Reviews</i> , 1997, 42, 181-205.  | 9.4  | 19        |
| 133 | The dislocation structure in L1 <sub>2</sub> ordered alloy Ni <sub>3</sub> Ge. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1994, 70, 1013-1025.  | 0.8  | 18        |
| 134 | On the yield anomaly in stoichiometric CoTi. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 329-331, 206-212.  | 2.6  | 18        |
| 135 | The microstructure of near-equiatomic B2/f.c.c. FeNiMnAl alloys. <i>Materials Characterization</i> , 2011, 62, 952-958.   | 1.9  | 18        |
| 136 | Advanced microstructural characterization of four East Antarctic firn/ice cores. <i>Journal of Glaciology</i> , 2011, 57, 796-810.  | 1.1  | 18        |
| 137 | The effects of stoichiometry on the dry sliding wear of FeAl. <i>Intermetallics</i> , 2013, 40, 19-27.  | 1.8  | 18        |
| 138 | Microstructural characterization of ice cores. <i>Annals of Glaciology</i> , 2005, 42, 441-444.   | 2.8  | 17        |
| 139 | Effects of Degree of Deformation and Deformation Temperature on Primary Recrystallization Textures in Polycrystalline Nickel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2815-2824.                       | 1.1  | 17        |
| 140 | The Effects of Cold Work on the Microstructure and Mechanical Properties of Intermetallic Strengthened Alumina-Forming Austenitic Stainless Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 3773-3785. | 1.1  | 17        |
| 141 | Orientation relationships of Laves phase and NiAl particles in an AFA stainless steel. <i>Philosophical Magazine</i> , 2015, 95, 4078-4094.   | 0.7  | 17        |
| 142 | Microstructural evolution of Fe-20Cr-30Ni-2Nb-5Al AFA steel during creep at 760°C. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 806, 140602.   | 2.6  | 17        |
| 143 | Dislocations and grain boundaries in polycrystalline ice: a preliminary study by synchrotron X-ray topography. <i>Journal of Materials Science</i> , 1992, 27, 2719-2725.   | 1.7  | 16        |
| 144 | The effects of local versus bulk disorder on the magnetic behavior of stoichiometric Ni <sub>3</sub> Al. <i>Intermetallics</i> , 2007, 15, 419-427.   | 1.8  | 16        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Î±- and Î²-Mn precipitates in the spinodal Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>25</sub> Al <sub>25</sub> alloy. Philosophical Magazine, 2007, 87, 5639-5656.  | 0.7 | 16        |
| 146 | Isothermal annealing of cold-rolled high-purity nickel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 476, 46-59.   | 2.6 | 16        |
| 147 | Effects of impurities and their redistribution during recrystallization of ice crystals. Journal of Glaciology, 2008, 54, 362-370.  | 1.1 | 16        |
| 148 | Dry sliding wear of eutectic Al-Si. Journal of Materials Science, 2010, 45, 969-978.  | 1.7 | 16        |
| 149 | A comparison of the dry sliding wear of single-phase f.c.c. carbon-doped Fe <sub>40.4</sub> Ni <sub>11.3</sub> Mn <sub>34.8</sub> Al <sub>7.5</sub> Cr <sub>6</sub> and CoCrFeMnNi high entropy alloys with 316 stainless steel. Materials Characterization, 2020, 170, 110693. | 1.9 | 16        |
| 150 | Improving the Low Temperature Ductility of NiAl. Materials Research Society Symposia Proceedings, 1988, 133, 633.   | 0.1 | 15        |
| 151 | Room Temperature Fracture of FeCo. Materials Research Society Symposia Proceedings, 1992, 288, 501.   | 0.1 | 15        |
| 152 | The effect of boron on the Hall-Petch behavior of Fe-45Al. Scripta Materialia, 1996, 34, 1219-1223.   | 2.6 | 15        |
| 153 | The effects of sulfuric acid on the mechanical properties of ice single crystals. Journal of Glaciology, 2000, 46, 239-243.   | 1.1 | 15        |
| 154 | The activation energies of antiphase-boundary tube annihilation in Fe-Al. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 2239-2247.   | 0.8 | 15        |
| 155 | Simulation of microstructural evolution during directional annealing with variable boundary energy and mobility. Acta Materialia, 2003, 51, 2755-2764.  | 3.8 | 15        |
| 156 | Antibody-mediated targeting of iron oxide nanoparticles to the folate receptor alpha increases tumor cell association in vitro and in vivo. International Journal of Nanomedicine, 2015, 10, 2595.  | 3.3 | 15        |
| 157 | Dislocations in Fe-45 at.% Al + B after high-temperature deformation. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 72, 1301-1310.   | 0.8 | 14        |
| 158 | Strain-induced ferromagnetism in FeAl single crystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 329-331, 334-338.  | 2.6 | 14        |
| 159 | Imaging dislocations in ice. Microscopy Research and Technique, 2003, 62, 70-82.  | 1.2 | 14        |
| 160 | The effect of particles on creep rate and microstructures of granular ice. Journal of Glaciology, 2008, 54, 533-537.  | 1.1 | 14        |
| 161 | Evolution of the specific surface area of snow during high-temperature gradient metamorphism. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,690.  | 1.2 | 14        |
| 162 | The Effects of H <sub>2</sub> SO <sub>4</sub> on the Mechanical Behavior and Microstructural Evolution of Polycrystalline Ice. Journal of Geophysical Research F: Earth Surface, 2018, 123, 535-556.  | 1.0 | 14        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | Effect of soluble particles on microstructural evolution during directional recrystallization. Acta Materialia, 2020, 188, 288-301.  | 3.8 | 14        |
| 164 | Dissimilar electron beam welding of the medium-entropy alloy (NiCoCr)94Al3Ti3 to 304 stainless steel. Scripta Materialia, 2022, 214, 114659.   | 2.6 | 14        |
| 165 | Annealing of Cold-Rolled Fe-40Al Single Crystals. Materials Research Society Symposia Proceedings, 1996, 460, 367.   | 0.1 | 13        |
| 166 | Dislocation identification and in situ straining in the spinodal Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>25</sub> Al <sub>25</sub> alloy. Microscopy Research and Technique, 2008, 71, 489-496.  | 1.2 | 13        |
| 167 | Structural evolution during ice sphere sintering. Hydrological Processes, 2010, 24, 2034-2040.   | 1.1 | 13        |
| 168 | Environmental embrittlement of two-phase Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>35</sub> Al <sub>15</sub> . Intermetallics, 2011, 19, 1533-1537.  | 1.8 | 13        |
| 169 | The impact of ice layers on gas transport through firn at the North Greenland Eemian Ice Drilling (NEEM) site, Greenland. Cryosphere, 2014, 8, 1801-1806.  | 1.5 | 13        |
| 170 | Microstructural characterization of snow, firn and ice. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180162.  | 1.6 | 13        |
| 171 | The formation mechanism, growth, and effect on the mechanical properties of precipitate free zones in the alumina-forming austenitic stainless steel Fe-20Cr-30Ni-2Nb-5Al during creep. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 820, 141561. | 2.6 | 13        |
| 172 | The effect of Al/Ti ratio on the evolution of precipitates and their effects on mechanical properties for Ni <sub>35</sub> (CoCrFe) <sub>55</sub> Al <sub>x</sub> Ti <sub>10-x</sub> high entropy alloys. Journal of Alloys and Compounds, 2022, 906, 164291.  | 2.8 | 13        |
| 173 | Some comments on dislocation bowing and partial separation during in-situ straining of Fe <sub>3</sub> Al. Philosophical Magazine Letters, 1987, 55, 3-6.  | 0.5 | 12        |
| 174 | Dynamic observation of dislocation sources at grain boundaries in ice. Philosophical Magazine Letters, 1992, 65, 279-281.  | 0.5 | 12        |
| 175 | Dislocation Mobility in HCL-Doped Ice. Materials Research Society Symposia Proceedings, 1994, 375, 287.  | 0.1 | 12        |
| 176 | Examination of Dislocations in Ice. Crystal Growth and Design, 2002, 2, 127-134.   | 1.4 | 12        |
| 177 | Containerless Consolidation of Mg Powders Using ECAE. Materials and Manufacturing Processes, 2010, 25, 1381-1384.  | 2.7 | 12        |
| 178 | Development of novel magnetic nanoparticles for hyperthermia cancer therapy. Proceedings of SPIE, 2011, 7901, 790115.  | 0.8 | 12        |
| 179 | Insight into the phase transformations between ice Ih and ice II from electron backscatter diffraction data. Scripta Materialia, 2012, 66, 69-72.  | 2.6 | 12        |
| 180 | Concentration dependence of Cr for alleviating environmental embrittlement in Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>35</sub> Al <sub>15</sub> . Intermetallics, 2015, 56, 28-32.   | 1.8 | 12        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 181 | Single-crystal ice surfaces unveil connection between macroscopic and molecular structure. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5349-5354.   | 3.3 | 12        |
| 182 | Manufacturing of intermetallic Mn-46%Al by laser powder bed fusion. Procedia CIRP, 2018, 74, 64-67.   | 1.0 | 12        |
| 183 | A comparison of the dry sliding wear behavior of NiCoCr medium entropy alloy with 316 stainless steel. Materials Characterization, 2020, 160, 110132.   | 1.9 | 12        |
| 184 | Fractography of ice. Journal of Materials Science Letters, 1989, 8, 1193-1194.  | 0.5 | 11        |
| 185 | Environmental Effects in B2 FeAl Alloys. Materials Research Society Symposia Proceedings, 1992, 288, 935.   | 0.1 | 11        |
| 186 | Observation of Dislocations in Ice. Journal of Physical Chemistry B, 1997, 101, 6158-6162.  | 1.2 | 11        |
| 187 | Preliminary microstructural and microchemical observations on pond and river accretion ice. Cold Regions Science and Technology, 2002, 35, 81-99.   | 1.6 | 11        |
| 188 | Microstructural characterization of firn. Hydrological Processes, 2007, 21, 1624-1629.  | 1.1 | 11        |
| 189 | Dry sliding wear of nanostructured Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>20</sub> Al <sub>30</sub> . Intermetallics, 2012, 23, 116-127.   | 1.8 | 11        |
| 190 | Enhanced mechanical properties of carbon-doped FeNiMnAlCr high entropy alloy via hot-rolling. Materials Characterization, 2019, 158, 109983.  | 1.9 | 11        |
| 191 | A model for French-press experiments of dry snow compaction. Cryosphere, 2020, 14, 1449-1458.   | 1.5 | 11        |
| 192 | Analysis of the elevated temperature deformation mechanisms and grain boundary strengthening of the alumina-forming austenitic stainless steel Fe-20Cr-30Ni-2Nb-5Al. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 814, 141219. | 2.6 | 11        |
| 193 | Transmission electron microscopy in situ straining of multiphase Ni-20at.%Al-30at.%Fe. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1993, 67, 663-674.  | 0.8 | 10        |
| 194 | Effect of Vacancies on the Tensile Properties of Fe-40Al Single Crystals in Air and Vacuum. Materials Characterization, 1999, 42, 161-167.  | 1.9 | 10        |
| 195 | An EBSD study of isothermally-annealed cold-rolled nickel. Microscopy Research and Technique, 2004, 63, 289-297.  | 1.2 | 10        |
| 196 | The effect of particles on dynamic recrystallization and fabric development of granular ice during creep. Journal of Glaciology, 2005, 51, 377-382.   | 1.1 | 10        |
| 197 | Investigation of Newtonian creep in polycrystalline ice. Philosophical Magazine Letters, 2006, 86, 763-771.   | 0.5 | 10        |
| 198 | Quantifying damage in polycrystalline ice via X-Ray computed micro-tomography. Acta Materialia, 2017, 127, 463-470.   | 3.8 | 10        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 199 | Optimization of the microstructure and mechanical properties of electron beam welded high-strength medium-entropy alloy (NiCoCr) <sub>94</sub> Al <sub>3</sub> Ti <sub>3</sub> . <i>Intermetallics</i> , 2022, 141, 107439.      | 1.8 | 10        |
| 200 | Interstitial strengthening in f.c.c. metals and alloys. , 2022, 1, 100034.   |     | 10        |
| 201 | The effects of sulfuric acid on the creep, recrystallization, and electrical properties of ice. <i>Canadian Journal of Physics</i> , 2003, 81, 395-400.  | 0.4 | 9         |
| 202 | Observation of strain-induced ferromagnetism in off-stoichiometric Fe <sub>2</sub> AlMn single crystals. <i>Materials Characterization</i> , 2004, 52, 209-216.  | 1.9 | 9         |
| 203 | Grain boundary grooving in ice in a scanning electron microscope. <i>Journal of Glaciology</i> , 2006, 52, 169-172.  | 1.1 | 9         |
| 204 | The effects of environment on the dry sliding wear of eutectic Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>35</sub> Al <sub>15</sub> . <i>Journal of Materials Science</i> , 2012, 47, 4827-4837.                                  | 1.7 | 9         |
| 205 | Surface instability and mass transfer during the bonding of ice spheres. <i>Philosophical Magazine</i> , 2013, 93, 3177-3193.  | 0.7 | 9         |
| 206 | Microstructural evolution of polycrystalline ice during confined creep testing. <i>Cold Regions Science and Technology</i> , 2016, 127, 25-36.   | 1.6 | 9         |
| 207 | The influence of sliding velocity and third bodies on the dry sliding wear of Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>25</sub> Al <sub>25</sub> against AISI 347 stainless steel. <i>Wear</i> , 2017, 374-375, 63-76.          | 1.5 | 9         |
| 208 | The effect of sliding velocity on the dry sliding wear of nanophase Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>25</sub> Al <sub>25</sub> against yttria-stabilized zirconia. <i>Intermetallics</i> , 2017, 83, 17-28.             | 1.8 | 9         |
| 209 | High strength and high ductility in a novel Fe <sub>40.2</sub> Ni <sub>11.3</sub> Mn <sub>30</sub> Al <sub>7.5</sub> Cr <sub>11</sub> multiphase high entropy alloy. <i>Journal of Alloys and Compounds</i> , 2020, 820, 153181. | 2.8 | 9         |
| 210 | Directional recrystallisation processing: a review. <i>International Materials Reviews</i> , 2021, 66, 256-286.  | 9.4 | 9         |
| 211 | Development of a new cryogenic tribotester and its application to the study of cryogenic wear of AISI 316 stainless steel. <i>Wear</i> , 2022, 496-497, 204309.  | 1.5 | 9         |
| 212 | Observations of the morphology and sublimation-induced changes in uncoated snow using scanning electron microscopy. <i>Hydrological Processes</i> , 2010, 24, 2041-2044.   | 1.1 | 8         |
| 213 | A comparison of dry sliding wear of Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>25</sub> Al <sub>25</sub> at room temperature and elevated temperature. <i>Intermetallics</i> , 2013, 39, 94-103.                                  | 1.8 | 8         |
| 214 | Understanding mNP hyperthermia for cancer treatment at the cellular scale. <i>Proceedings of SPIE</i> , 2013, 8584, 85840E.  | 0.8 | 8         |
| 215 | The effects of Ca <sup>++</sup> on the strength of polycrystalline ice. <i>Journal of Glaciology</i> , 2016, 62, 954-962.  | 1.1 | 8         |
| 216 | Investigating the thermophysical properties of the ice-snow interface under a controlled temperature gradient Part II: Analysis. <i>Cold Regions Science and Technology</i> , 2016, 125, 12-20.                                  | 1.6 | 8         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 217 | Effects of niobium particles on the wear behavior of powder metallurgical $\hat{3}$ -TiAl alloy in different environments. <i>Wear</i> , 2019, 434-435, 202964.  | 1.5 | 8         |
| 218 | Microstructures and deformation mechanisms of the medium-entropy alloy (NiCoCr) <sub>76</sub> (Ni <sub>6</sub> AlTi) <sub>3</sub> . <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 849, 143449. | 2.6 | 8         |
| 219 | On <i>In-Situ</i> Study of Dislocation/Grain Boundary Interactions Using X-ray Topography and Tem. <i>Materials Research Society Symposia Proceedings</i> , 1993, 319, 203.  | 0.1 | 7         |
| 220 | The role of edge and screw dislocations on hydrogen embrittlement of Fe $\hat{c}$ 40Al. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 319-321, 352-355.  | 2.6 | 7         |
| 221 | Imaging of uncoated snow crystals using a low-vacuum scanning electron microscope. <i>Journal of Glaciology</i> , 2002, 48, 479-480.   | 1.1 | 7         |
| 222 | The effect of substitutional elements on the strain-induced ferromagnetism in B2-structured Fe $\hat{c}$ Al single crystals. <i>Intermetallics</i> , 2004, 12, 851-858.  | 1.8 | 7         |
| 223 | Initial experiments on the effects of particles at grain boundaries on the anelasticity and creep behavior of granular ice. <i>Annals of Glaciology</i> , 2004, 39, 397-401.   | 2.8 | 7         |
| 224 | Magnetic ordering of sputtered nanostructured Fe <sub>50</sub> /Ni <sub>50</sub> films. <i>IEEE Transactions on Magnetics</i> , 2005, 41, 3358-3360.   | 1.2 | 7         |
| 225 | An investigation of the effects of particles on creep of polycrystalline ice. <i>Scripta Materialia</i> , 2006, 55, 91-94.   | 2.6 | 7         |
| 226 | Synthesis and heating effect of iron/iron oxide composite and iron oxide nanoparticles. , 2007, 6440, 64400H.  |     | 7         |
| 227 | Martensitic Phase Transformation in a f.c.c./B2 FeNiMnAl Alloy. <i>Journal of Materials Science</i> , 2016, 51, 7831-7842.   | 1.7 | 7         |
| 228 | Comparison of the effects of unidirectional and sign $\hat{c}$ alternating temperature gradients on the sintering of ice spheres. <i>Hydrological Processes</i> , 2017, 31, 871-879.   | 1.1 | 7         |
| 229 | Magnetic nanoparticle synthesis. , 2018, , 197-229.  |     | 7         |
| 230 | Breakdown of growth front at elevated drawing velocity during directional recrystallization. <i>Philosophical Magazine Letters</i> , 2019, 99, 167-172.  | 0.5 | 7         |
| 231 | Microstructure, mechanical properties and biocompatibility of laser metal deposited Ti $\hat{c}$ 23Nb coatings on a NiTi substrate. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 848, 143402. | 2.6 | 7         |
| 232 | The Microstructure and Tensile Properties of Extruded Melt-Spun Ribbons of Iron-Rich B2 FeAl. <i>Materials Research Society Symposia Proceedings</i> , 1986, 81, 315.  | 0.1 | 6         |
| 233 | Room-temperature deformation of PdIn. <i>Journal of Materials Science</i> , 1991, 26, 4303-4306.   | 1.7 | 6         |
| 234 | Dynamic observations of dislocation/grain-boundary interactions in ice. <i>Annals of Glaciology</i> , 2000, 31, 236-240.   | 2.8 | 6         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 235 | The effects of environment on the room-temperature mechanical behavior of single-slip oriented FeAl single crystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 329-331, 729-733. | 2.6 | 6         |
| 236 | Microstructure and Mechanical Properties of Fe-Ni-Mn-Al Alloys. <i>Materials Research Society Symposia Proceedings</i> , 2004, 842, 251.   | 0.1 | 6         |
| 237 | Nanonstructural Analysis of Advanced Alloys in a Local Electrode Atom Probe. <i>Microscopy and Microanalysis</i> , 2005, 11, .   | 0.2 | 6         |
| 238 | On the effects of temperature on the strength of H <sub>2</sub> SO <sub>4</sub> -doped ice single crystals. <i>Journal of Glaciology</i> , 2009, 55, 481-484.  | 1.1 | 6         |
| 239 | Magnetically-triggered heating of Fe-Al powders. <i>Intermetallics</i> , 2011, 19, 1517-1525.  | 1.8 | 6         |
| 240 | Microstructures and Mechanical Properties of Two-Phase FeNiMnAl Alloys. <i>Materials Science Forum</i> , 0, 783-786, 2549-2554.  | 0.3 | 6         |
| 241 | Elevated temperature directional recrystallization of high-purity nickel. <i>Philosophical Magazine</i> , 2019, 99, 1057-1078.   | 0.7 | 6         |
| 242 | Room Temperature Strength and Fracture of FeAl And NiAl.. <i>Materials Research Society Symposia Proceedings</i> , 1990, 213, 533.   | 0.1 | 5         |
| 243 | Order and recrystallization in deformed Fe[ $\delta$ ]70 at.% Co. <i>Philosophical Magazine Letters</i> , 1993, 68, 327-333.   | 0.5 | 5         |
| 244 | Observation of slip transmission through a grain boundary in ice. <i>Journal of Materials Science</i> , 1996, 31, 2373-2378.   | 1.7 | 5         |
| 245 | A Model for the Yield Strength Anomaly in FeAl. <i>Materials Research Society Symposia Proceedings</i> , 1996, 460, 373.   | 0.1 | 5         |
| 246 | Characterization of Porous Snow with SEM and Micro CT. <i>Microscopy and Microanalysis</i> , 2009, 15, 1110-1111.  | 0.2 | 5         |
| 247 | Microstructure and Mechanical Behavior in Spinodal Fe <sub>35</sub> Ni <sub>15</sub> Mn <sub>25</sub> Al <sub>25</sub> Alloy. <i>Microscopy and Microanalysis</i> , 2009, 15, 116-117.   | 0.2 | 5         |
| 248 | L <sub>1</sub> <sup>2</sup> precipitates within L <sub>2</sub> <sup>1</sup> ordered Fe-21.7Mn-14.5Al. <i>Philosophical Magazine</i> , 2011, 91, 3547-3556.   | 0.7 | 5         |
| 249 | A scanning electron microscope technique for identifying the mineralogy of dust in ice cores. <i>Journal of Glaciology</i> , 2011, 57, 511-514.  | 1.1 | 5         |
| 250 | Effects of confining pressure on flaw formation during the consolidation of ductile powders by angular extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 536, 24-32.          | 2.6 | 5         |
| 251 | Accelerated precipitation due to mechanical milling of two-phase B <sub>2</sub> /L <sub>21</sub> Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>20</sub> Al <sub>30</sub> . <i>Journal of Alloys and Compounds</i> , 2013, 559, 97-100.                           | 2.8 | 5         |
| 252 | Microstructure and mechanical properties of two-phase Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>20</sub> Al <sub>30</sub> . Part I: Microstructure. <i>Journal of Materials Science</i> , 2013, 48, 7435-7445.   | 1.7 | 5         |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 253 | Microstructure and mechanical behavior of directionally solidified Fe <sub>35</sub> Ni <sub>15</sub> Mn <sub>25</sub> Al <sub>25</sub> . Intermetallics, 2013, 32, 413-422.                          | 1.8 | 5         |
| 254 | Characterization of Melt Layers in Firn at Summit, Greenland using Micro CT. Microscopy and Microanalysis, 2013, 19, 642-643.  | 0.2 | 5         |
| 255 | Observations of the creep of polar firn. Journal of Glaciology, 2022, 68, 269-287.   | 1.1 | 5         |
| 256 | The Structure of Rapidly Solidified Powders of Ni <sub>3</sub> Al and Ni <sub>3</sub> Al + B + Ti. Materials Research Society Symposia Proceedings, 1983, 28, 395.                                   | 0.1 | 4         |
| 257 | Annealing of Quenched Fe-Al Alloys With/Without B And Ti. Materials Research Society Symposia Proceedings, 1998, 552, 1.   | 0.1 | 4         |
| 258 | The chemistry of grain boundaries in Greenland ice. Journal of Glaciology, 2000, 46, 703-706.  | 1.1 | 4         |
| 259 | An Overview of the Mechanical Properties of FeAl. Materials Research Society Symposia Proceedings, 2008, 1128, 20101.  | 0.1 | 4         |
| 260 | Effect of sliding environment on dry sliding wear of as-cast eutectic Al-Si. Journal of Materials Science, 2010, 45, 6849-6852.  | 1.7 | 4         |
| 261 | A new technique for firn grain-size measurement using SEM image analysis. Journal of Glaciology, 2010, 56, 12-19.  | 1.1 | 4         |
| 262 | Using borehole logging and electron backscatter diffraction to orient an ice core from Upper Fremont Glacier, Wyoming, USA. Journal of Glaciology, 2011, 57, 832-840.                                | 1.1 | 4         |
| 263 | Study of yield stress anomaly of Fe <sub>2</sub> MnAl single crystal by <i>in situ</i> TEM straining. Philosophical Magazine, 2012, 92, 959-985.   | 0.7 | 4         |
| 264 | The Mechanical Properties of Near-equiatomic B <sub>2</sub> /f.c.c. FeNiMnAl Alloys. Materials Research Society Symposia Proceedings, 2013, 1516, 249-254.   | 0.1 | 4         |
| 265 | The effects of annealing on the microstructure and mechanical properties of Fe <sub>28</sub> Ni <sub>18</sub> Mn <sub>33</sub> Al <sub>21</sub> . Journal of Materials Science, 2015, 50, 7821-7834. | 1.7 | 4         |
| 266 | Climate Effects on Firn Permeability Are Preserved Within a Firn Column. Journal of Geophysical Research F: Earth Surface, 2019, 124, 830-837.   | 1.0 | 4         |
| 267 | Dynamic Observations of the Densification of Polar Firn Under Compression Using a Micro-Computed Tomograph. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2021JF006290.              | 1.0 | 4         |
| 268 | The Strength and Ductility of Intermetallic Compounds: Grain Size Effects. Materials Research Society Symposia Proceedings, 1986, 81, 195.   | 0.1 | 3         |
| 269 | Hard sphere modeling of the effect of slip on interstitial sites in the B <sub>2</sub> structure. Journal of Materials Research, 1993, 8, 1203-1205.   | 1.2 | 3         |
| 270 | Extrusion processing of FeCo. Journal of Materials Science, 1994, 29, 742-748.   | 1.7 | 3         |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 271 | The effect of X-radiation on the plastic deformation of ice. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1996, 73, 1355-1361.                        | 0.8 | 3         |
| 272 | The Mechanical Properties of FeAl. Materials Research Society Symposia Proceedings, 1998, 552, 1.   | 0.1 | 3         |
| 273 | Microstructure and Mechanical Properties of an Extruded Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>25</sub> Al <sub>25</sub> Alloy. Materials Research Society Symposia Proceedings, 2006, 980, 2.             | 0.1 | 3         |
| 274 | Effect of solute on microstructural evolution during directional recrystallization. Journal of Alloys and Compounds, 2020, 815, 152358.   | 2.8 | 3         |
| 275 | The Effect of Antiphase Boundary Tubes on the Hardness of FeAl. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 3694-3698.                                   | 1.1 | 3         |
| 276 | A model for the yield strength anomaly of FeAl. , 0, .  |     | 3         |
| 277 | The annihilation of antiphase boundary tubes and their effect on strengthening in Ni <sub>3</sub> Al. Acta Materialia, 2022, 237, 118185.   | 3.8 | 3         |
| 278 | A method for determining dislocation Burgers' vectors in ice. Journal of Electron Microscopy Technique, 1986, 3, 357-358.   | 1.1 | 2         |
| 279 | Strain-Induced Ferromagnetism in Fe-40Al Single Crystals. Materials Research Society Symposia Proceedings, 2000, 646, 197.  | 0.1 | 2         |
| 280 | The Yield Anomaly in CoTi. Materials Research Society Symposia Proceedings, 2000, 646, 215.   | 0.1 | 2         |
| 281 | Scanning Electron Microscopy of Vostok Accretion Ice. Microscopy and Microanalysis, 2002, 8, 1546-1547.   | 0.2 | 2         |
| 282 | Recrystallization Processing of Cold-Rolled Nickel. Materials Research Society Symposia Proceedings, 2004, 819, N7.1.1.   | 0.1 | 2         |
| 283 | The Heating Effects of Dextran Coated Iron Oxides. Materials Research Society Symposia Proceedings, 2006, 962, 1.   | 0.1 | 2         |
| 284 | A multidisciplinary approach to introductory engineering design. , 2008, , .  |     | 2         |
| 285 | Microstructure and mechanical properties of two-phase Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>20</sub> Al <sub>30</sub> : part II mechanical properties. Journal of Materials Science, 2013, 48, 6535-6541. | 1.7 | 2         |
| 286 | Manganese-based Permanent Magnets. Metals, 2015, 5, 1435-1436.  | 1.0 | 2         |
| 287 | The Dartmouth Center for Cancer Nanotechnology Excellence: magnetic hyperthermia. Nanomedicine, 2015, 10, 1685-1692.  | 1.7 | 2         |
| 288 | Magnetic Heating of Fe-Co Ferrites Experiments and Modeling. Nano LIFE, 2016, 06, 1650007.  | 0.6 | 2         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 289 | Rare Earth Magnets. , 2018, , 187-194.   |     | 2         |
| 290 | The strength of Ni <sub>3</sub> Al containing titanium and boron. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1988, 19, 732-734. | 1.4 | 1         |
| 291 | Studies of Defect Behavior in Large-Grain, Polycrystalline Ice Using Synchrotron X-ray Topography. Molecular Crystals and Liquid Crystals, 1994, 240, 73-80.                 | 0.3 | 1         |
| 292 | Wear of Ductile-Phase Toughened NiAl. Materials Research Society Symposia Proceedings, 1994, 364, 555.   | 0.1 | 1         |
| 293 | A New Tetragonal Boride Phase in FeAl+B Type Alloys. Materials Research Society Symposia Proceedings, 1996, 460, 331.  | 0.1 | 1         |
| 294 | Study of Electrical Properties of Dislocations in ZNS Using Electric Force Microscopy. Materials Research Society Symposia Proceedings, 1999, 578, 255.                      | 0.1 | 1         |
| 295 | The effect of H <sub>2</sub> SO <sub>4</sub> on the stress exponent in ice single crystals. Geological Society Special Publication, 2000, 176, 39-45.                        | 0.8 | 1         |
| 296 | SEM/EDS Studies of Impurities in Natural Ice. Microscopy and Microanalysis, 2002, 8, 1398-1399.  | 0.2 | 1         |
| 297 | Structure, Chemistry and Properties of Grain Boundaries in H <sub>2</sub> SO <sub>4</sub> Doped Ice. Microscopy and Microanalysis, 2002, 8, 1544-1545.                       | 0.2 | 1         |
| 298 | Coercivity in nanostructured FeCo-based powders prepared by mechanical alloying. Materials Research Society Symposia Proceedings, 2006, 980, 9.                              | 0.1 | 1         |
| 299 | Microstructural evolution in the fine-grained region of the Siple Dome (Antarctica) ice core. Journal of Glaciology, 2011, 57, 1046-1056.                                    | 1.1 | 1         |
| 300 | In situ TEM observations of dislocation/anti-phase boundary interactions. Philosophical Magazine, 2011, 91, 3242-3252.   | 0.7 | 1         |
| 301 | An Overview of Dry Sliding Wear of Two-Phase FeNiMnAl Alloys. Materials Research Society Symposia Proceedings, 2012, 1516, 103-108.  | 0.1 | 1         |
| 302 | Giant strain-induced ferromagnetism in Fe <sub>59</sub> Mn <sub>17</sub> Al <sub>24</sub> . Philosophical Magazine, 2012, 92, 849-860.                                       | 0.7 | 1         |
| 303 | Dislocations in nanostructured two-phase Fe <sub>30</sub> Ni <sub>20</sub> Mn <sub>20</sub> Al <sub>30</sub> . Microscopy Research and Technique, 2013, 76, 263-267.         |     | 1         |
| 304 | Polyethylene. , 2018, , 163-168.   |     | 1         |
| 305 | Lead Zirconate Titanate. , 2018, , 111-115.  |     | 1         |
| 306 | Dislocations in B2 ordered alloys. Proceedings Annual Meeting Electron Microscopy Society of America, 1989, 47, 314-315.   | 0.0 | 1         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 307 | Simultaneous Twinning and Microband-Induced Plasticity of a Compositionally Complex Alloy with Interstitial Carbon at Cryogenic Temperatures. , 2023, 1, 60-71.                     |     | 1         |
| 308 | A New Method to Characterize Dislocation Loops. Materials Research Society Symposia Proceedings, 1994, 375, 319.  | 0.1 | 0         |
| 309 | Dynamic In-Situ Synchrotron X-Ray Topographic Observations Of Dislocations In Notched Ice Crystals. Materials Research Society Symposia Proceedings, 1996, 437, 119.                | 0.1 | 0         |
| 310 | Temperature Dependence of Dislocations in Notched Ice Crystals. Journal of Physical Chemistry B, 1997, 101, 6102-6104.  | 1.2 | 0         |
| 311 | A Low Cost EBSD System: Implementation and Application. Microscopy and Microanalysis, 1999, 5, 244-245.   | 0.2 | 0         |
| 312 | The Effects Of Environment On The Room Temperature Deformation Of B2-Structured Fe-43Al Single-Crystals. Materials Research Society Symposia Proceedings, 2000, 646, 269.           | 0.1 | 0         |
| 313 | The Effects of Ternary Elemental Additions on the Structure and Magnetic Properties of Nanocrystalline Feco Powders. Materials Research Society Symposia Proceedings, 2002, 753, 1. | 0.1 | 0         |
| 314 | Characterization of directionally recrystallized cold-rolled nickel using EBSP. Microscopy and Microanalysis, 2002, 8, 1264-1265.   | 0.2 | 0         |
| 315 | Magnetic Properties of Nanocrystalline Fe50Co50 Powders. Materials Research Society Symposia Proceedings, 2003, 788, 3131.  | 0.1 | 0         |
| 316 | Magnetic and ordering studies of sputtering nanostructured Fe/sub 50/Ni/sub 50/ films. , 2005, , .  |     | 0         |
| 317 | Physics and Chemistry, and the Archives of Snow and Firn: Workshop on the Microstructure and Properties of Firn; Hanover, New Hampshire, 10-11 March 2008. Eos, 2008, 89, 244-244.  | 0.1 | 0         |
| 318 | On the Effect of Strain Rate and Temperature on the Yield Strength Anomaly in L21-structured Fe2AlMn. Materials Research Society Symposia Proceedings, 2008, 1128, 50901.           | 0.1 | 0         |
| 319 | Preface to the 13th Physics and Chemistry of Ice Conference (PCI-2014). Journal of Physical Chemistry B, 2014, 118, 13323-13323.  | 1.2 | 0         |
| 320 | Sintering of Ice Spheres under Different Thermal Conditions. Microscopy and Microanalysis, 2015, 21, 2097-2098.   | 0.2 | 0         |
| 321 | Effects of Environment on the Wear Behavior of P/M Ti-47Al-2Cr-0.2Mo. Key Engineering Materials, 0, 770, 106-115.   | 0.4 | 0         |
| 322 | Nickel-Based Superalloys. , 2018, , 131-136.  |     | 0         |
| 323 | Glass Fiber Reinforced Polymers. , 2018, , 71-74.   |     | 0         |
| 324 | Phase transformation via atomic-scale periodic interfacial energy. Materials Today Physics, 2022, 24, 100668.   | 2.9 | 0         |

| #   | ARTICLE   | IF | CITATIONS |
|-----|---|----|-----------|
| 325 | Grand Challenges in Metals and Alloys. , 2022, 1, . |    | 0         |