# B-J Lee

List of Publications by Year
in descending order

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| 265 papers | 12,314 citations | 24978 57 h-index | 34900 98 g-index |
| 272 all docs | 272 docs citations | 272 times ranked | 6847 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Second nearest-neighbor modified embedded-atom-method potential. Physical Review B, 2000, 62, 8564-8567. | 1.1 | 533 |
| 2 | Second nearest-neighbor modified embedded atom method potentials for bcc transition metals. Physical Review B, 2001, 64, . | 1.1 | 519 |
| 3 | Understanding the physical metallurgy of the CoCrFeMnNi high-entropy alloy: an atomistic simulation study. Npj Computational Materials, 2018, 4, . | 3.5 | 501 |
| 4 | Semiempirical atomic potentials for the fcc metals Cu, Ag, Au, Ni, Pd, Pt, Al, and Pb based on first and second nearest-neighbor modified embedded atom method. Physical Review B, 2003, 68, . | 1.1 | 446 |
| 5 | Cryogenic strength improvement by utilizing room-temperature deformation twinning in a partially recrystallized VCrMnFeCoNi high-entropy alloy. Nature Communications, 2017, 8, 15719. | 5.8 | 278 |
| 6 | Prediction of interface reaction products between Cu and various solder alloys by thermodynamic calculation. Acta Materialia, 1997, 45, 1867-1874. | 3.8 | 242 |
| 7 | On the stability of Cr carbides. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1992, 16, 121-149. | 0.7 | 220 |
| 8 | Novel Co-rich high performance twinning-induced plasticity (TWIP) and transformation-induced plasticity (TRIP) high-entropy alloys. Scripta Materialia, 2019, 165, 39-43. | 2.6 | 200 |
| 9 | Effects of Mn and Al contents on cryogenic-temperature tensile and Charpy impact properties in four austenitic high-Mn steels. Acta Materialia, 2015, 100, 39-52. | 3.8 | 194 |
| 10 | Thermal stability of unsupported gold nanoparticle: a molecular dynamics study. Surface Science, 2002, 512, 262-268. | 0.8 | 175 |
| 11 | Modified embedded-atom method interatomic potentials for Ti and Zr. Physical Review B, 2006, 74, . | 1.1 | 174 |
| 12 | Exceptional phase-transformation strengthening of ferrous medium-entropy alloys at cryogenic temperatures. Acta Materialia, 2018, 161, 388-399. | 3.8 | 174 |
| 13 | A modified embedded-atom method interatomic potential for the Feâ€“C system. Acta Materialia, 2006, 54, 701-711. | 3.8 | 159 |
| 14 | Thermodynamic assessments of the Sn-In and Sn-Bi binary systems. Journal of Electronic Materials, 1996, 25, 983-991. | 1.0 | 146 |
| 15 | The modified embedded-atom method interatomic potentials and recent progress in atomistic simulations. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 510-522. | 0.7 | 140 |
| 16 | Novel Co-rich high entropy alloys with superior tensile properties. Materials Research Letters, 2019, 7, 82-88. | 4.1 | 139 |
| 17 | Revision of thermodynamic descriptions of the Fe-Cr & Fe-Ni liquid phases. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1993, 17, 251-268. | 0.7 | 135 |
| 18 | Novel ultra-high-strength (ferrite + austenite) duplex lightweight steels achieved by fine dislocation substructures (Taylor lattices), grain refinement, and partial recrystallization. Acta Materialia, 2015, 96, 301-310. | 3.8 | 135 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Development of strong and ductile metastable face-centered cubic single-phase high-entropy alloys. Acta Materialia, 2019, 181, 318-330. | 3.8 | 134 |
| 20 | Modified embedded-atom method interatomic potentials for the Tiâ€“C and Tiâ€“N binary systems. Acta Materialia, 2008, 56, 3481-3489. | 3.8 | 127 |
| 21 | A thermodynamic study on the Agî—‚Sbî—‚Sn system. Journal of Alloys and Compounds, 1996, 238, 155-166. | 2.8 | 124 |
| 22 | Thermodynamic calculation on the stability of (Fe,Mn)3AlC carbide in high aluminum steels. Journal of Alloys and Compounds, 2010, 505, 217-223. | 2.8 | 120 |
| 23 | Thermodynamics-aided alloy design and evaluation of Pb-free solder, SnBiInZn system. Acta Materialia, 1997, 45, 951-960. | 3.8 | 117 |
| 24 | Role of yttrium in activation of ã€ c + a ã€‰ slip in magnesium: An atomistic approach. Scripta Materialia, 2015, 108, 104-108. | 2.6 | 116 |
| 25 | Effect of annealing temperature on microstructural modification and tensile properties in 0.35 Câ€“3.5 Mnâ€“5.8 Al lightweight steel. Acta Materialia, 2013, 61, 5050-5066. | 3.8 | 113 |
| 26 | Atomistic Modeling of pure Mg and Mgâ€“Al systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2009, 33, 650-657. | 0.7 | 112 |
| 27 | Thermodynamic Evaluation for the Y2O3-BaO-CuOx System. Journal of the American Ceramic Society, 1991, 74, 78-84. | 1.9 | 103 |
| 28 | Origin of the plasticity in bulk amorphous alloys. Journal of Materials Research, 2007, 22, 3087-3097. | 1.2 | 98 |
| 29 | Thermodynamic assessment of the Fe-Nb-Ti-C-N system. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 2423-2439. | 1.1 | 97 |
| 30 | The origin of (001) texture evolution in FePt thin films on amorphous substrates. Journal of Applied Physics, 2006, 99, 053906. | 1.1 | 95 |
| 31 | Modified embedded-atom method interatomic potentials for the Feâ€“Tiâ€“C and Feâ€“Tiâ€“N ternary systems. Acta Materialia, 2009, 57, 3140-3147. | 3.8 | 93 |
| 32 | Deformation-induced nanocrystallization and its influence on work hardening in a bulk amorphous matrix composite. Acta Materialia, 2004, 52, 1525-1533. | 3.8 | 90 |
| 33 | Molecular dynamics simulation study of the effect of grain size on the deformation behavior of nanocrystalline body-centered cubic iron. Scripta Materialia, 2011, 64, 494-497. | 2.6 | 90 |
| 34 | Effect of Î¼-precipitates on the microstructure and mechanical properties of non-equiatomic CoCrFeNiMo medium-entropy alloys. Journal of Alloys and Compounds, 2019, 781, 75-83. | 2.8 | 90 |
| 35 | Thermodynamic prediction of interface phases at Cu/solder joints. Journal of Electronic Materials, 1998, 27, 1161-1166. | 1.0 | 89 |
| 36 | Thermodynamic assessments of the Sn-Zn and In-Zn binary systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1996, 20, 471-480. | 0.7 | 88 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Theory for plasticity of face-centered cubic metals. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6560-6565. | 3.3 | 87 |
| 38 | A modified embedded atom method interatomic potential for silicon. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2007, 31, 95-104. | 0.7 | 85 |
| 39 | The phase stability of equiatomic CoCrFeMnNi high-entropy alloy: Comparison between experiment and calculation results. Journal of Alloys and Compounds, 2017, 719, 189-193. | 2.8 | 83 |
| 40 | A new strategy for designing immiscible medium-entropy alloys with excellent tensile properties. Acta Materialia, 2020, 193, 71-82. | 3.8 | 80 |
| 41 | Thermal destabilization of binary and complex metal hydrides by chemical reaction: A thermodynamic analysis. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2006, 30, 65-69. | 0.7 | 77 |
| 42 | Improvement of interfacial bonding strength in roll-bonded Mg/Al clad sheets through annealing and secondary rolling process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 628, 1-10. | 2.6 | 76 |
| 43 | Ultrastrong duplex high-entropy alloy with 2â€¯GPa cryogenic strength enabled by an accelerated martensitic transformation. Scripta Materialia, 2019, 171, 67-72. | 2.6 | 76 |
| 44 | A modified embedded-atom method interatomic potential for the Feâ€“H system. Acta Materialia, 2007, 55, 6779-6788. | 3.8 | 75 |
| 45 | A modified embedded atom method interatomic potential for carbon. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2005, 29, 7-16. | 0.7 | 74 |
| 46 | Modified embedded-atom method interatomic potentials for Mgâ€“X (X=Y, Sn, Ca) binary systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2015, 48, 27-34. | 0.7 | 73 |
| 47 | Effects of carbide precipitation on the strength and Charpy impact properties of low carbon Mnâ€“Niâ€“Mo bainitic steels. Journal of Nuclear Materials, 2001, 297, 138-148. | 1.3 | 72 |
| 48 | A modified embedded-atom method interatomic potential for the Feâ€“N system: A comparative study with the Feâ€“C system. Acta Materialia, 2006, 54, 4597-4607. | 3.8 | 72 |
| 49 | FCC to BCC transformation-induced plasticity based on thermodynamic phase stability in novel V10Cr10Fe45CoxNi35â^'x medium-entropy alloys. Scientific Reports, 2019, 9, 2948. | 1.6 | 71 |
| 50 | Modified embedded-atom method interatomic potentials for the Co-Cr, Co-Fe, Co-Mn, Cr-Mn and Mn-Ni binary systems. Computational Materials Science, 2017, 130, 121-129. | 1.4 | 70 |
| 51 | Thermodynamic calculation of LiHâ†”Li3AlH6â†”LiAlH4 reactions. Journal of Alloys and Compounds, 2006, 420, 286-290. | 2.8 | 69 |
| 52 | Modified embedded-atom method interatomic potentials for pure Mn and the Feâ€“Mn system. Acta Materialia, 2009, 57, 474-482. | 3.8 | 67 |
| 53 | Utilization of brittle Ïƒ phase for strengthening and strain hardening in ductile VCrFeNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 743, 665-674. | 2.6 | 67 |
| 54 | A Thermodynamic Evaluation of the Cr-Mn and Fe-Cr-Mn Systems. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1993, 24, 1919-1933. | 1.4 | 65 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Modified embedded-atom interatomic potential for Fe-Ni, Cr-Ni and Fe-Cr-Ni systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2017, 57, 98-106. | 0.7 | 65 |
| 56 | Effects of Mn Addition on Tensile and Charpy Impact Properties in Austenitic Fe-Mn-C-Al-Based Steels for Cryogenic Applications. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5419-5430. | 1.1 | 59 |
| 57 | Design of new face-centered cubic high entropy alloys by thermodynamic calculation. Metals and Materials International, 2017, 23, 839-847. | 1.8 | 59 |
| 58 | Precipitation-driven metastability engineering of carbon-doped CoCrFeNiMo medium-entropy alloys at cryogenic temperature. Scripta Materialia, 2020, 188, 140-145. | 2.6 | 59 |
| 59 | Dislocation binding as an origin for the improvement of room temperature ductility in Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 715, 266-275. | 2.6 | 57 |
| 60 | Cryogenic-temperature fracture toughness analysis of non-equi-atomic V10Cr10Fe45Co20Ni15 high-entropy alloy. Journal of Alloys and Compounds, 2019, 809, 151864. | 2.8 | 57 |
| 61 | Calculation of Phase Diagrams for the YO1.5-BaO-CuOx System. Journal of the American Ceramic Society, 1989, 72, 314-319. | 1.9 | 56 |
| 62 | Phase-field modeling for 3D grain growth based on a grain boundary energy database. Modelling and Simulation in Materials Science and Engineering, 2014, 22, 034004. | 0.8 | 56 |
| 63 | Modified embedded-atom method interatomic potential for theFeâ˜Cualloy system and cascade simulations on pure Fe andFeâ˜Cualloys. Physical Review B, 2005, 71, . | 1.1 | 55 |
| 64 | Intergranular segregation of Cr in Ti-stabilized low-Cr ferritic stainless steel. Scripta Materialia, 2009, 61, 1133-1136. | 2.6 | 55 |
| 65 | An identification scheme of grain boundaries and construction of a grain boundary energy database. Scripta Materialia, 2011, 64, 1152-1155. | 2.6 | 55 |
| 66 | Deformation-induced phase transformation of Co20Cr26Fe20Mn20Ni14 high-entropy alloy during high-pressure torsion at 77 K. Materials Letters, 2017, 202, 86-88. | 1.3 | 55 |
| 67 | An intermediate temperature creep model for Ni-based superalloys. International Journal of Plasticity, 2016, 79, 153-175. | 4.1 | 54 |
| 68 | Applications of computational thermodynamics â€" the extension from phase equilibrium to phase transformations and other properties. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2007, 31, 53-74. | 0.7 | 53 |
| 69 | Molecular dynamics simulation of the crystallization of a liquid gold nanoparticle. Journal of Crystal Growth, 2003, 250, 558-564. | 0.7 | 52 |
| 70 | Effects of Zn on ã€ˆâ€¯+â€¯aã€‰ slip and grain boundary segregation of Mg alloys. Scripta Materialia, 2019, 160, 39-43. | 2.6 | 52 |
| 71 | Deformation behavior of a Co-Cr-Fe-Ni-Mo medium-entropy alloy at extremely low temperatures. Materials Today, 2021, 50, 55-68. | 8.3 | 51 |
| 72 | Prediction of composition dependency of glass forming ability of Mgâ€"Cuâ€"Y alloys by thermodynamic approach. Scripta Materialia, 2005, 52, 969-972. | 2.6 | 50 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Effects of aluminum content on cracking phenomenon occurring during cold rolling of three ferrite-based lightweight steel. Acta Materialia, 2013, 61, 5626-5635. | 3.8 | 50 |
| 74 | Modified embedded-atom method interatomic potentials for the Feâ€“Nb and Feâ€“Ti binary systems. Scripta Materialia, 2008, 59, 595-598. | 2.6 | 49 |
| 75 | Atomistic modeling of the Tiâ€“Al binary system. Computational Materials Science, 2016, 119, 1-8. | 1.4 | 49 |
| 76 | Role of brittle sigma phase in cryogenic-temperature-strength improvement of non-equi-atomic Fe-rich VCrMnFeCoNi high entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 724, 403-410. | 2.6 | 49 |
| 77 | A thermodynamic evaluation of the Fe-Cr-V-C system. Journal of Phase Equilibria and Diffusion, 1992, 13, 349-364. | 0.3 | 48 |
| 78 | Effects of Annealing Temperature on Microstructure and Tensile Properties in Ferritic Lightweight Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 843-853. | 1.1 | 47 |
| 79 | Effects of deformationâ€“induced BCC martensitic transformation and twinning on impact toughness and dynamic tensile response in metastable VCrFeCoNi highâ€“entropy alloy. Journal of Alloys and Compounds, 2019, 785, 1056-1067. | 2.8 | 46 |
| 80 | Plastic Deformation Behavior of 40Feâ€“25Niâ€“15Crâ€“10Coâ€“10V High-Entropy Alloy for Cryogenic Applications. Metals and Materials International, 2019, 25, 277-284. | 1.8 | 46 |
| 81 | A modified embedded-atom method interatomic potential for the Cuâ€“Zr system. Journal of Materials Research, 2008, 23, 1095-1104. | 1.2 | 45 |
| 82 | Atomistic modeling of pure Li and Mgâ€“Li system. Modelling and Simulation in Materials Science and Engineering, 2012, 20, 035005. | 0.8 | 45 |
| 83 | Microstructure and Mechanical Properties of High-Entropy Alloy Co20Cr26Fe20Mn20Ni14 Processed by High-Pressure Torsion at 77â€‰K and 300â€‰K. Scientific Reports, 2018, 8, 11074. | 1.6 | 45 |
| 84 | Atomistic modeling of pure Co and Coâ€“Al system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2012, 38, 7-16. | 0.7 | 44 |
| 85 | Grain boundary engineering approach to improve hydrogen embrittlement resistance in Fe Mn C TWIP steel. International Journal of Hydrogen Energy, 2018, 43, 10129-10140. | 3.8 | 44 |
| 86 | Stress induced crystallization of amorphous materials and mechanical properties of nanocrystalline materials: a molecular dynamics simulation study. Acta Materialia, 2003, 51, 6233-6240. | 3.8 | 42 |
| 87 | Effect of Austenite Stability on Microstructural Evolution and Tensile Properties in Intercritically Annealed Medium-Mn Lightweight Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2674-2685. | 1.1 | 41 |
| 88 | Origin of radiation resistance in multi-principal element alloys. Scientific Reports, 2018, 8, 16015. | 1.6 | 41 |
| 89 | Effects of transformation-induced plasticity (TRIP) on tensile property improvement of Fe45Co30Cr10V10Ni5-xMnx high-entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 772, 138809. | 2.6 | 41 |
| 90 | Computation of grain boundary energies. Modelling and Simulation in Materials Science and Engineering, 2004, 12, 621-632. | 0.8 | 40 |

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|---|---|---|---|
| 91 | A semi-empirical atomic potential for the Fe-Cr binary system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2001, 25, 527-534. | 0.7 | 38 |
| 92 | Size dependency of melting point of crystalline nano particles and nano wires: A thermodynamic modeling. Metals and Materials International, 2009, 15, 531-537. | 1.8 | 37 |
| 93 | Effects of annealing temperature on microstructures and tensile properties of a single FCC phase CoCuMnNi high-entropy alloy. Journal of Alloys and Compounds, 2020, 812, 152111. | 2.8 | 37 |
| 94 | Modified embedded-atom method interatomic potential for the Feâ€“Pt alloy system. Journal of Materials Research, 2006, 21, 199-208. | 1.2 | 36 |
| 95 | Effects of intergranular carbide precipitation on delayed fracture behavior in three TWinning Induced Plasticity (TWIP) steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 587, 85-99. | 2.6 | 36 |
| 96 | A Comparative Study on Hydrogen Diffusion in Amorphous and Crystalline Metals Using a Molecular Dynamics Simulation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2906-2915. | 1.1 | 36 |
| 97 | Effect of microstructure on the cleavage fracture strength of low carbon Mnâ€“Niâ€“Mo bainitic steels. Journal of Nuclear Materials, 2004, 324, 33-40. | 1.3 | 35 |
| 98 | Thermodynamic Calculations on the Stability of Cu2S in Low Carbon Steels. ISIJ International, 2007, 47, 163-171. | 0.6 | 35 |
| 99 | Effect of a high angle grain boundary on deformation behavior of Al nanopillars. Scripta Materialia, 2015, 107, 5-9. | 2.6 | 35 |
| 100 | Dynamic tensionâ€“compression asymmetry of martensitic transformation in austenitic Feâ€“(0.4,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 | 3.8 | 35 |
| 101 | Behavior of amorphous materials under hydrostatic pressures: A molecular dynamics simulation study. Metals and Materials International, 2004, 10, 467-474. | 1.8 | 33 |
| 102 | Thermodynamic assessment of the NaHâ†”Na3AlH6â†”NaAlH4 hydride system. Journal of Alloys and Compounds, 2006, 424, 370-375. | 2.8 | 33 |
| 103 | Shear localization and the plasticity of bulk amorphous alloys. Scripta Materialia, 2010, 63, 231-234. | 2.6 | 33 |
| 104 | Governing factors for the formation of 4H or 6H-SiC polytype during SiC crystal growth: An atomistic computational approach. Journal of Crystal Growth, 2014, 389, 120-133. | 0.7 | 33 |
| 105 | Experimental investigation and phase diagram of CoCrMnNiâ€“Fe system bridging high-entropy alloys and high-alloyed steels. Journal of Alloys and Compounds, 2019, 785, 320-327. | 2.8 | 32 |
| 106 | Correlation between plasticity and other materials properties of Cuâ€“Zr bulk metallic glasses: An atomistic simulation study. Acta Materialia, 2011, 59, 805-811. | 3.8 | 31 |
| 107 | Role of atomic-scale chemical heterogeneities in improving the plasticity of Cu-Zr-Ag bulk amorphous alloys. Acta Materialia, 2018, 157, 209-217. | 3.8 | 31 |
| 108 | Modified embedded-atom method interatomic potentials for Mgâ€“Alâ€“Ca and Mgâ€“Alâ€“Zn ternary systems. Journal of Magnesium and Alloys, 2021, 9, 317-335. | 5.5 | 31 |

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|---|---|---|---|
| 109 | Activation of non-basal <cÂ+Âa> slip in multicomponent Mg alloys. Journal of Magnesium and Alloys, 2022, 10, 585-597. | 5.5 | 31 |
| 110 | Thermodynamic approach for predicting the glass forming ability of amorphous alloys. Intermetallics, 2004, 12, 1103-1107. | 1.8 | 30 |
| 111 | Thermodynamic analysis of the effect of C, Mn and Al on microstructural evolution of lightweight steels. Scripta Materialia, 2013, 68, 339-342. | 2.6 | 30 |
| 112 | Modified embedded-atom method interatomic potentials for the Niâ€“Co binary and the Niâ€“Alâ€“Co ternary systems. Modelling and Simulation in Materials Science and Engineering, 2015, 23, 055004. | 0.8 | 30 |
| 113 | Second nearest-neighbor modified embedded-atom method interatomic potentials for the Pt-M (M = Al,) Tj ETQq1 1 0.784314 rgBT /O Thermochemistry, 2017, 59, 131-141. | 0.7 | 30 |
| 114 | Investigation of the phase equilibria in the Sn-Bi-In alloy system. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 1503-1515. | 1.1 | 29 |
| 115 | Sputter erosion of Si(001) using a new silicon MEAM potential and different thermostats. Nuclear Instruments & Methods in Physics Research B, 2007, 255, 195-201. | 0.6 | 29 |
| 116 | Effect of stress on self-diffusion in bcc Fe: An atomistic simulation study. Scripta Materialia, 2010, 63, 39-42. | 2.6 | 29 |
| 117 | Microstructural analysis of cracking phenomenon occurring during cold rolling of (0.1~0.7)C-3Mn-5Al lightweight steels. Metals and Materials International, 2015, 21, 43-53. | 1.8 | 29 |
| 118 | A numerical model to predict mechanical properties of Ni-base disk superalloys. International Journal of Plasticity, 2018, 110, 123-144. | 4.1 | 29 |
| 119 | A thermodynamic description of the Co-Cr-Fe-Ni-V system for high-entropy alloy design. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 66, 101624. | 0.7 | 28 |
| 120 | Effects of Cr addition on Charpy impact energy in austenitic 0.45C-24Mn-(0,3,6)Cr steels. Journal of Materials Science and Technology, 2020, 50, 21-30. | 5.6 | 28 |
| 121 | Atomistic modeling of the Cuâ€“Zrâ€“Ag bulk metallic glass system. Scripta Materialia, 2009, 61, 801-804. | 2.6 | 27 |
| 122 | Modified embedded-atom method interatomic potentials for the Nb-C, Nb-N, Fe-Nb-C, and Fe-Nb-N systems. Journal of Materials Research, 2010, 25, 1288-1297. | 1.2 | 27 |
| 123 | Development and application of Ni-Ti and Ni-Al-Ti 2NN-MEAM interatomic potentials for Ni-base superalloys. Computational Materials Science, 2017, 139, 225-233. | 1.4 | 27 |
| 124 | Influence of hydrogen on the grain boundary crack propagation in bcc iron: A molecular dynamics simulation. Computational Materials Science, 2018, 149, 424-434. | 1.4 | 27 |
| 125 | A Thermodynamic Modelling of the Stability of Sigma Phase in the Cr-Fe-Ni-V High-Entropy Alloy System. Journal of Phase Equilibria and Diffusion, 2018, 39, 694-701. | 0.5 | 27 |
| 126 | A thermodynamic study on the MnC and FeMn systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1989, 13, 345-354. | 0.7 | 26 |

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|---|---|---|---|
| 127 | A modified embedded atom method interatomic potential for the Cuâ€“Ni system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2004, 28, 125-132. | 0.7 | 26 |
| 128 | Orderâ€“disorder character of PbTiO<sub>3</sub>. Journal of Physics Condensed Matter, 2008, 20, 015224. | 0.7 | 26 |
| 129 | Modified embedded-atom method interatomic potential for the Feâ€“Al system. Journal of Physics Condensed Matter, 2010, 22, 175702. | 0.7 | 26 |
| 130 | {100} texture evolution in bcc Fe sheets - Computational design and experiments. Acta Materialia, 2016, 106, 106-116. | 3.8 | 26 |
| 131 | Modified embedded-atom method interatomic potentials for pure Zn and Mg-Zn binary system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2018, 60, 200-207. | 0.7 | 26 |
| 132 | 2.3 GPa cryogenic strength through thermal-induced and deformation-induced body-centered cubic martensite in a novel ferrous medium entropy alloy. Scripta Materialia, 2021, 204, 114157. | 2.6 | 26 |
| 133 | Strain hardening of an amorphous matrix composite due to deformation- induced nanocrystallization during quasistatic compression. Applied Physics Letters, 2004, 84, 2781-2783. | 1.5 | 25 |
| 134 | Origin of hydrogen embrittlement in vanadium-based hydrogen separation membranes. International Journal of Hydrogen Energy, 2012, 37, 13583-13593. | 3.8 | 25 |
| 135 | Origin of unrealistic blunting during atomistic fracture simulations based on MEAM potentials. Philosophical Magazine, 2014, 94, 1745-1753. | 0.7 | 25 |
| 136 | Enhanced high temperature hydrogen permeation characteristics of Vâ€“Ni alloy membranes containing a trace amount of yttrium. Scripta Materialia, 2016, 116, 122-126. | 2.6 | 25 |
| 137 | Formulation of the A2/B2/D03 atomic ordering energy and a thermodynamic analysis of the Fe-Si system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1987, 11, 253-270. | 0.7 | 24 |
| 138 | Prediction of hydrogen permeability in Vâ€“Al and Vâ€“Ni alloys. Journal of Membrane Science, 2013, 430, 234-241. | 4.1 | 24 |
| 139 | Microstructural Developments and Tensile Properties of Lean Fe-Mn-Al-C Lightweight Steels. Jom, 2014, 66, 1857-1867. | 0.9 | 24 |
| 140 | Effect of 1Al addition on deformation behavior of Mg. Journal of Magnesium and Alloys, 2021, 9, 489-498. | 5.5 | 24 |
| 141 | A thermodynamic evaluation of the Fe-Cr-Mn-C system. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1993, 24, 1017-1025. | 1.4 | 23 |
| 142 | Effects of tungsten and molybdenum on high-temperature tensile properties of five heat-resistant austenitic stainless steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 656, 190-199. | 2.6 | 23 |
| 143 | Atomistic modeling of IIIâ€“V nitrides: modified embedded-atom method interatomic potentials for GaN, InN and Ga<sub>1â^'x</sub>In<sub>x</sub>N. Journal of Physics Condensed Matter, 2009, 21, 325801. | 0.7 | 22 |
| 144 | Atmospheric pressure plasma treatment on graphene grown by chemical vapor deposition. Current Applied Physics, 2015, 15, 563-568. | 1.1 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Effects of Mn and Mo addition on high-temperature tensile properties in high-Ni-containing austenitic cast steels used for turbo-charger application. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 147-155. | 2.6 | 22 |
| 146 | Effect of alloying elements (Al, Co, Fe, Ni) on the solubility ofÂhydrogen in vanadium: A thermodynamic calculation. International Journal of Hydrogen Energy, 2012, 37, 7836-7847. | 3.8 | 21 |
| 147 | Effects of homogenization temperature on cracking during cold-rolling of Al0.5CoCrFeMnNi high-entropy alloy. Materials Chemistry and Physics, 2018, 210, 187-191. | 2.0 | 21 |
| 148 | Improvement of tensile properties in (austenite+ferrite+Î°-carbide) triplex hot-rolled lightweight steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 730, 177-186. | 2.6 | 21 |
| 149 | Calculation of Î±/Î³ equilibria in SA508 grade 3 steels for intercritical heat treatment. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 1441-1447. | 1.1 | 20 |
| 150 | Three-dimensional Monte Carlo simulation for the effect of precipitates and sub-boundaries on abnormal grain growth. Scripta Materialia, 2012, 66, 398-401. | 2.6 | 20 |
| 151 | Effects of Annealing Treatment Prior to Cold Rolling on the Edge Cracking Phenomenon of Ferritic Lightweight Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 3844-3856. | 1.1 | 20 |
| 152 | Effects of deformation-induced martensitic transformation on cryogenic fracture toughness for metastable Si8V2Fe45Cr10Mn5Co30 high-entropy alloy. Acta Materialia, 2022, 225, 117568. | 3.8 | 20 |
| 153 | A thermodynamic study on the V-C and FE-V systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1991, 15, 283-291. | 0.7 | 19 |
| 154 | Prediction of Ti/Al2O3 interface reaction products by diffusion simulation. Acta Materialia, 1997, 45, 3993-3999. | 3.8 | 19 |
| 155 | A modified embedded-atom method interatomic potential for indium. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 82-88. | 0.7 | 19 |
| 156 | Design of sustainable V-based hydrogen separation membranes based on grain boundary segregation. International Journal of Hydrogen Energy, 2014, 39, 12031-12044. | 3.8 | 19 |
| 157 | A modified embedded-atom method interatomic potential for ionic systems:2NNMEAM+Qeq. Physical Review B, 2016, 93, . | 1.1 | 19 |
| 158 | Texture evolution by grain growth under a system of anisotropic grain boundary energy. Scripta Materialia, 1997, 37, 1761-1767. | 2.6 | 18 |
| 159 | A modified embedded-atom method interatomic potential for Germanium. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 34-42. | 0.7 | 18 |
| 160 | Structural disordering of amorphous alloys: A molecular dynamics analysis. Scripta Materialia, 2009, 61, 911-914. | 2.6 | 18 |
| 161 | Tunable Catalytic Alloying Eliminates Stacking Faults in Compound Semiconductor Nanowires. Nano Letters, 2012, 12, 855-860. | 4.5 | 18 |
| 162 | Effects of Cr and B Contents on Volume Fraction of (Cr,Fe)2B and Hardness in Fe-Based Alloys Used for Powder Injection Molding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2237-2250. | 1.1 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | An approach for screening single phase high-entropy alloys using an in-house thermodynamic database. Intermetallics, 2018, 101, 56-63. | 1.8 | 18 |
| 164 | A thermodynamic study on the FeMnC system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1989, 13, 355-365. | 0.7 | 17 |
| 165 | Modified embedded-atom method calculation for the Niâ€“W system. Journal of Materials Research, 2003, 18, 1863-1867. | 1.2 | 17 |
| 166 | An interatomic potential for the Li-Co-O ternary system. Computational Materials Science, 2018, 142, 47-58. | 1.4 | 17 |
| 167 | Comparison of the Advantages Conferred by Mobility and Energy of the Grain Boundary in Inducing Abnormal Grain Growth Using Monte Carlo Simulations. Materials Transactions, 2009, 50, 2521-2525. | 0.4 | 16 |
| 168 | Thermodynamic properties of phase-field models for grain boundary segregation. Acta Materialia, 2016, 112, 150-161. | 3.8 | 16 |
| 169 | Second nearest-neighbor modified embedded-atom method interatomic potentials for the Pd-M (Mâ€¯=â€¯Al,) Tj ETQq1 1 0.784314 r Thermochemistry, 2018, 62, 172-186. | 0.7 | 16 |
| 170 | Effects of strain rate on room- and cryogenic-temperature compressive properties in metastable V10Cr10Fe45Co35 high-entropy alloy. Scientific Reports, 2019, 9, 6163. | 1.6 | 16 |
| 171 | Numerical simulation of diffusional reactions between multiphase alloys with different matrix phases. Scripta Materialia, 1999, 40, 573-579. | 2.6 | 15 |
| 172 | Flat-surface, step-edge, facetâ€“facet, and facetâ€“step diffusion barriers in growth of a Pb mesa. Surface Science, 2008, 602, 2284-2294. | 0.8 | 15 |
| 173 | Atomistic modeling of an impurity element and a metalâ€“impurity system: pure P and Feâ€“P system. Journal of Physics Condensed Matter, 2012, 24, 225002. | 0.7 | 15 |
| 174 | Modified embedded-atom method interatomic potentials for pure Y and the Vâ€“Pdâ€“Y ternary system. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 085008. | 0.8 | 15 |
| 175 | Effect of Mn Addition on Microstructural Modification and Cracking Behavior of Ferritic Light-Weight Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5469-5485. | 1.1 | 15 |
| 176 | Excellent combination of cryogenic-temperature strength and ductility of high-entropy-alloy-cored multi-layered sheet. Journal of Alloys and Compounds, 2019, 797, 465-470. | 2.8 | 15 |
| 177 | A thermodynamic study on the FE-V-C system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1991, 15, 293-306. | 0.7 | 14 |
| 178 | Numerical procedure for simulation of multicomponent and multi-layered phase diffusion. Metals and Materials International, 1999, 5, 1-15. | 0.2 | 14 |
| 179 | Atomistic modeling of the Alâ€“H and Niâ€“H systems. Journal of Materials Research, 2011, 26, 1552-1560. | 1.2 | 14 |
| 180 | Body-centered-cubic martensite and the role on room-temperature tensile properties in Si-added SiVCrMnFeCo high-entropy alloys. Journal of Materials Science and Technology, 2021, 76, 222-230. | 5.6 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | A thermodynamic description for the Coâ€“Crâ€“Feâ€“Mnâ€“Ni system. Journal of Materials Science, 2022, 57, 1373-1389. | 1.7 | 14 |
| 182 | A semi-empirical interatomic potential for the Cuâ€“Ti binary system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 733-736. | 2.6 | 13 |
| 183 | Thermodynamic analysis for the size-dependence of nanowire composition grown by a vaporâ€“liquidâ€“solid method. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 669-674. | 0.7 | 13 |
| 184 | Influence of Cu, Cr and C on the irradiation defect in Fe: A molecular dynamics simulation study. Journal of Nuclear Materials, 2008, 373, 28-38. | 1.3 | 13 |
| 185 | Manipulation of surface energy anisotropy in iron using surface segregation of phosphorus: An atomistic simulation. Scripta Materialia, 2013, 68, 329-332. | 2.6 | 13 |
| 186 | Interatomic Potential of Liâ€“Mnâ€“O and Molecular Dynamics Simulations on Li Diffusion in Spinel Li1â€“xMn2O4. Journal of Physical Chemistry C, 2017, 121, 13008-13017. | 1.5 | 13 |
| 187 | Influence of initial microstructures on intercritical annealing behaviour in a medium Mn steel. Materials Science and Technology, 2019, 35, 2092-2100. | 0.8 | 13 |
| 188 | Estimation of orderâ€“disorder transition temperature in Ptâ€“Co alloy by Monte Carlo simulation using modified embedded atom method. Scripta Materialia, 2001, 45, 495-502. | 2.6 | 12 |
| 189 | Second-nearest-neighbor modified embedded-atom method interatomic potential for V-M (MÂ=ÂCu, Mo,) Tj ETQq1 1 0.784314 rgBT | 1.4 | 12 |
| 190 | The Origin of Activation of Non-basal Slip in Mg-Ce Dilute Alloy: An Atomistic Simulation Study. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 964-974. | 1.1 | 12 |
| 191 | Computational design of V-CoCrFeMnNi high-entropy alloys: An atomistic simulation study. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2021, 74, 102317. | 0.7 | 12 |
| 192 | A comparative study on grain boundary segregation and solute clustering in Mg-Al-Zn and Mg-Zn-Ca alloys. Journal of Alloys and Compounds, 2022, 894, 162539. | 2.8 | 12 |
| 193 | Thermodynamic analysis of solid-state metal/Si interfacial reactions. Journal of Materials Research, 1999, 14, 1002-1017. | 1.2 | 11 |
| 194 | Analysis and Prevention of Dent Defects Formed during Strip Casting of Twin-Induced Plasticity Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 1087-1098. | 1.1 | 11 |
| 195 | Effect of Tempering Time on Microstructure, Tensile Properties, and Deformation Behavior of a Ferritic Light-Weight Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 235-247. | 1.1 | 11 |
| 196 | Intergranular embrittlement of iron by phosphorus segregation: an atomistic simulation. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 025012. | 0.8 | 11 |
| 197 | Design of cost-effective Fe-based amorphous coating alloys having high amorphous forming ability by thermodynamic calculation. Metals and Materials International, 2014, 20, 577-583. | 1.8 | 11 |
| 198 | Effects of Cr and Nb addition on high-temperature tensile properties in austenitic cast steels used for turbo-charger application. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 316-324. | 2.6 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Modified embedded-atom method interatomic potentials for Mg-Nd and Mg-Pb binary systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2017, 57, 55-61. | 0.7 | 11 |
| 200 | Evolution of microstructure and tensile properties of cold-drawn hyper-eutectoid steel wires during post-deformation annealing. Journal of Materials Science and Technology, 2020, 41, 1-11. | 5.6 | 11 |
| 201 | Second nearest-neighbor modified embedded-atom method interatomic potentials for the Co-M (M = Ti,) Tj ETQq1 1 0.784314 rgBT /Ov 101791. | 0.7 | 11 |
| 202 | Interface characteristics and mechanical behavior of additively manufactured multi-material of stainless steel and Inconel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 847, 143318. | 2.6 | 11 |
| 203 | Thermal decomposition of Li3AlH6 with TiAl3 catalyst. Catalysis Today, 2007, 120, 292-297. | 2.2 | 10 |
| 204 | Effects of (Cr,Fe)2B borides on hardness in powder-injection-molded product fabricated with Fe-based alloy powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 366-372. | 2.6 | 10 |
| 205 | Atomistic simulation of hydrogen diffusion at tilt grain boundaries in vanadium. Metals and Materials International, 2013, 19, 1221-1225. | 1.8 | 10 |
| 206 | Parallel three-dimensional Monte Carlo simulations for effects of precipitates and sub-boundaries on abnormal grain growth of Goss grains in Feâ€“3%Si steel. Philosophical Magazine, 2013, 93, 4198-4212. | 0.7 | 10 |
| 207 | Structural changes during lithiation and delithiation of Si anodes in Li-ion batteries: A large scale molecular dynamics study. Metals and Materials International, 2014, 20, 1003-1009. | 1.8 | 10 |
| 208 | Effects of Phosphorus and Carbon Contents on Amorphous Forming Ability in Fe-based Amorphous Alloys Used for Thermal Spray Coatings. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2573-2580. | 1.1 | 9 |
| 209 | Critical assessment of Pt surface energy â€“ An atomistic study. Surface Science, 2018, 670, 8-12. | 0.8 | 9 |
| 210 | Self-Assembly of Pulverized Nanoparticles: An Approach to Realize Large-Capacity, Long-Lasting, and Ultra-Fast-Chargeable Na-Ion Batteries. Nano Letters, 2021, 21, 9044-9051. | 4.5 | 9 |
| 211 | Evaluation of off-diagonal diffusion coefficient from phase diagram information. Journal of Phase Equilibria and Diffusion, 2001, 22, 241-246. | 0.3 | 8 |
| 212 | Kinetics of mesa overlayer growth: Climbing of adatoms onto the mesa top. Applied Physics Letters, 2008, 92, 021909. | 1.5 | 8 |
| 213 | A modified embedded-atom method interatomic potential for the Vâ€“H system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 302-307. | 0.7 | 8 |
| 214 | Effects of C and Si on strain aging of strain-based API X60 pipeline steels. Metals and Materials International, 2017, 23, 450-458. | 1.8 | 8 |
| 215 | Second nearest-neighbor modified embedded atom method interatomic potentials for the Na unary and Na-Sn binary systems. Computational Materials Science, 2020, 185, 109953. | 1.4 | 8 |
| 216 | Second-nearest-neighbor modified embedded-atom method interatomic potential for Cu-M (MÂ=ÂCo, Mo) binary systems. Computational Materials Science, 2020, 178, 109627. | 1.4 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | Formulation of the aL/L12 atomic ordering energy and a thermodynamic analysis of the Fe-Ni System. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1988, 12, 393-403. | 0.7 | 7 |
| 218 | Novel strip-cast Mg/Al clad sheets with excellent tensile and interfacial bonding properties. Scientific Reports, 2016, 6, 26333. | 1.6 | 7 |
| 219 | Computational screening of alloying elements for the development of sustainable V-based hydrogen separation membranes. Journal of Membrane Science, 2016, 497, 270-281. | 4.1 | 7 |
| 220 | 3D simulations of grain growth in polycrystalline sheets and rods: Effects of free surface and shape of specimen. Scripta Materialia, 2016, 110, 113-116. | 2.6 | 7 |
| 221 | Carbide Formation and Matrix Strengthening by Nb Addition in Austenitic Stainless Cast Steels Used for Turbo-Charger-Housing Materials. Metals and Materials International, 2020, 26, 1506-1514. | 1.8 | 7 |
| 222 | Diffusion in A15 Nb3Sn: An atomistic study. Acta Materialia, 2022, 234, 118050. | 3.8 | 7 |
| 223 | Atomistic modeling for interfacial properties of Ni-Al-V ternary system. Metals and Materials International, 2014, 20, 423-429. | 1.8 | 6 |
| 224 | Modified embedded-atom interatomic potential for Coâ€“W and Alâ€“W systems. Transactions of Nonferrous Metals Society of China, 2015, 25, 907-914. | 1.7 | 6 |
| 225 | Data to reproduce and modify â€œAn approach for screening single phase high-entropy alloys using an in-house thermodynamic databaseâ€• Data in Brief, 2018, 20, 1337-1339. | 0.5 | 6 |
| 226 | A thermodynamic description of the Alâ€“Cuâ€“Feâ€“Mn system for an immiscible medium-entropy alloy design. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2020, 71, 101995. | 0.7 | 6 |
| 227 | Phase-field model with relaxation of the partition coefficient. Computational Materials Science, 2021, 188, 110184. | 1.4 | 6 |
| 228 | Predictive Analysis of Ti/AlN Interfacial Reaction Using Diffusion Simulation. Scripta Materialia, 1998, 38, 499-507. | 2.6 | 5 |
| 229 | Monte Carlo Simulation of Phase Separation Behavior in a Cu-Co Alloy Nanoparticle. Journal of Materials Research, 2002, 17, 925-928. | 1.2 | 5 |
| 230 | Replacement of Ni by Mn in High-Ni-Containing Austenitic Cast Steels used for Turbo-Charger Application. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 568-574. | 1.1 | 5 |
| 231 | Modified embedded-atom method interatomic potential for the Mgâ€“Znâ€“Ca ternary system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 67, 101674. | 0.7 | 5 |
| 232 | Interatomic potentials for Pt-C and Pd-C systems and a study of structure-adsorption relationship in large Pt/graphene system. Computational Materials Science, 2020, 185, 109946. | 1.4 | 5 |
| 233 | Effects of temperature and loading rate on phase stability and deformation mechanism in metastable V10Cr10Co30FexNi50-x high entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 804, 140766. | 2.6 | 5 |
| 234 | Excellent strength-ductility combination of multi-layered sheets composed of high-strength V10Cr10Fe50Co30 high entropy alloy and 304 austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 823, 141727. | 2.6 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | A Semi-Empirical Atomistic Approach in Materials Research. Journal of Phase Equilibria and Diffusion, 2009, 30, 509-516. | 0.5 | 4 |
| 236 | The effect of porosity on the elasticity of pure titanium: An atomistic simulation. Metals and Materials International, 2010, 16, 421-425. | 1.8 | 4 |
| 237 | Size dependence in self-bending mechanism of Ge/Si bilayer nanofilms. Journal of Applied Physics, 2011, 109, 074314. | 1.1 | 4 |
| 238 | Interpretation of high-temperature tensile properties by thermodynamically calculated equilibrium phase diagrams of heat-resistant austenitic cast steels. Metals and Materials International, 2017, 23, 43-53. | 1.8 | 4 |
| 239 | Second nearest-neighbor modified embedded-atom method interatomic potentials for the Mo-M (MÂ=ÂAl,) Tj ETQq1 1 0.784314 rgB | 1.4 | 4 |
| 240 | Strengthâ€“ductility enhancement in multi-layered sheet with high-entropy alloy and high-Mn twinning-induced plasticity steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 822, 141670. | 2.6 | 4 |
| 241 | Effects of Temperature and Oxygen Partial Pressure on Nonstoichiometry of YBa2Cu3O6+delta. Journal of the American Ceramic Society, 1993, 76, 1609-1610. | 1.9 | 3 |
| 242 | Structural characterization and stress-relaxation behavior of superlattice Cu5Zr. Scripta Materialia, 2008, 58, 5-8. | 2.6 | 3 |
| 243 | A semi-empirical methodology to predict hydrogen permeability in amorphous alloy membranes. Journal of Membrane Science, 2014, 472, 102-109. | 4.1 | 3 |
| 244 | Isothermal Treatment Effects on Precipitates and Tensile Properties of an HSLA Steel. Metals and Materials International, 2018, 24, 525-531. | 1.8 | 3 |
| 245 | Effects of Cr Reduction on High-Temperature Strength of High-Ni Austenitic Cast Steels Used for High-Performance Turbo-chargers. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 4604-4614. | 1.1 | 3 |
| 246 | Effects of V or Cu Addition on High-Temperature Tensile Properties of High-Ni-Containing Austenitic Cast Steels Used for High-Performance Turbo-Charger Housings. Metals and Materials International, 2019, 25, 285-294. | 1.8 | 3 |
| 247 | Ultrafast Na Transport into Crystalline Sn via Dislocationâ€Pipe Diffusion. Small, 2022, 18, e2104944. | 5.2 | 3 |
| 248 | Second nearest-neighbor modified embedded atom method interatomic potentials for Na-Mâ”Sn (MÂ=ÂCu,) Tj ETQq0 0 0 rgBT /Overloc | 1.4 | 3 |
| 249 | The formation of sub-10nm nanohole array on block copolymer thin films on gold surface using surface neutralization based on O2 plasma treatment and self-assembled monolayer. Surface Science, 2010, 604, 1034-1039. | 0.8 | 2 |
| 250 | Durability screening of Pt ternary alloy (111) surfaces for oxygen reduction reaction using Density Functional Theory. Surfaces and Interfaces, 2020, 18, 100440. | 1.5 | 2 |
| 251 | Pressure dependence of thermodynamic interaction parameters for binary solid solution phases: An atomistic simulation study. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2021, 75, 102342. | 0.7 | 2 |
| 252 | A second nearest-neighbor modified embedded-atom method combined with a charge equilibration interatomic potential for the Liâ€“Niâ€“O ternary system and Li diffusion in lithium-ion battery cathode structure. Journal of Power Sources, 2022, 542, 231790. | 4.0 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 253 | Effects of Crystallographic Structure and Cr on the Rate of Void Nucleation in BCC Fe: An Atomistic Simulation Study. Metals and Materials International, 2008, 14, 283-290. | 1.8 | 1 |
| 254 | A summary of the CALPHAD XXXIX conference. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, C1-C21. | 0.7 | 1 |
| 255 | Replacement of Ni by Mn in Commercial High-Ni Austenitic Cast Steels Used for High-Performance Turbocharger Housings. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2585-2593. | 1.1 | 1 |
| 256 | Effect of Plasma Ignition on the Growth Temperature Decrease of Single-Walled Carbon Nanotubes in a Plasma-Coupled Hybrid Chemical-Vapor-Deposition System. Journal of the Korean Physical Society, 2020, 76, 1110-1115. | 0.3 | 1 |
| 257 | Medium-range Orders in Amorphous Alloys and Their Role on the Plasticity: A Molecular Dynamics Viewpoint Study. Journal of Korean Institute of Metals and Materials, 2010, 48, 101-108. | 0.4 | 1 |
| 258 | Understanding the Plasticity of Amorphous Alloys Via the Interpretation of Structural Evolution Inside a Shear Band. Korean Journal of Materials Research, 2009, 19, 276-280. | 0.1 | 1 |
| 259 | Estimation of Relative Glass Forming Abilities of Multicomponent Alloy Systems. Materials Transactions, 2007, 48, 1671-1674. | 0.4 | 0 |
| 260 | Probing the hydrogen movement in Zr-Cu amorphous alloys using molecular dynamics simulations. , 2011, , . | | 0 |
| 261 | Dislocation Behavior and Grain Boundary Segregation of Mgâ€“Zn Alloys. Minerals, Metals and Materials Series, 2019, , 215-218. | 0.3 | 0 |
| 262 | Authorsâ€™ Reply to Discussion of â€œEffects of Cr Reduction on High-Temperature Strength of High-Ni Austenitic Cast Steels Used for High-Performance Turbochargersâ€• Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1098-1100. | 1.1 | 0 |
| 263 | Ultrafast Na Transport into Crystalline Sn via Dislocation-Pipe Diffusion for Rapid Battery Charging. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 264 | Role of A phase Separating Element on the Plasticity of Amorphous Alloys : Experiment and Atomic Simulation Study. Korean Journal of Materials Research, 2009, 19, 79-84. | 0.1 | 0 |
| 265 | Understanding on the Role of Rare Earth Elements in Activation of $$ leftlangle {ext{c}} + {ext{a}} ightangle $$ Slip in Magnesium: An Atomistic Approach. Minerals, Metals and Materials Series, 2017, , 491-495. | 0.3 | 0 |