B-J Lee

List of Publications by Citations

261 papers	8,998 citations	49 h-index	83 g-index
272 ext. papers	10,682 ext. citations	4.2 avg, IF	6.56 L-index

#	Paper	IF	Citations
261	Second nearest-neighbor modified embedded-atom-method potential. *Physical Review B*, **2000**, 62, 8564-8567	3.3	430
260	Second nearest-neighbor modified embedded atom method potentials for bcc transition metals. *Physical Review B*, **2001**, 64,	3.3	422
259	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,	3.3	368
258	Understanding the physical metallurgy of the CoCrFeMnNi high-entropy alloy: an atomistic simulation study. *Npj Computational Materials*, **2018**, 4,	10.9	269
257	Prediction of interface reaction products between Cu and various solder alloys by thermodynamic calculation. *Acta Materialia*, **1997**, 45, 1867-1874	8.4	204
256	Cryogenic strength improvement by utilizing room-temperature deformation twinning in a partially recrystallized VCrMnFeCoNi high-entropy alloy. *Nature Communications*, **2017**, 8, 15719	17.4	190
255	On the stability of Cr carbides. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **1992**, 16, 121-149	1.9	177
254	Thermal stability of unsupported gold nanoparticle: a molecular dynamics study. *Surface Science*, **2002**, 512, 262-268	1.8	148
253	Modified embedded-atom method interatomic potentials for Ti and Zr. *Physical Review B*, **2006**, 74,	3.3	145
252	A modified embedded-atom method interatomic potential for the Fe□ system. *Acta Materialia*, **2006**, 54, 701-711	8.4	129
251	Thermodynamic assessments of the Sn-In and Sn-Bi binary systems. *Journal of Electronic Materials*, **1996**, 25, 983-991	1.9	122
250	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	8.4	117
249	A thermodynamic study on the Ag?Sb?Sn system. *Journal of Alloys and Compounds*, **1996**, 238, 155-166	5.7	114
248	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	1.9	112
247	Thermodynamic calculation on the stability of (Fe,Mn)3AlC carbide in high aluminum steels. *Journal of Alloys and Compounds*, **2010**, 505, 217-223	5.7	109
246	Novel Co-rich high performance twinning-induced plasticity (TWIP) and transformation-induced plasticity (TRIP) high-entropy alloys. *Scripta Materialia*, **2019**, 165, 39-43	5.6	108
245	Revision of thermodynamic descriptions of the Fe-Cr & Fe-Ni liquid phases. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **1993**, 17, 251-268	1.9	108

244	Thermodynamics-aided alloy design and evaluation of Pb-free solder, SnBiInZn system. *Acta Materialia*, **1997**, 45, 951-960	8.4	101
243	Exceptional phase-transformation strengthening of ferrous medium-entropy alloys at cryogenic temperatures. *Acta Materialia*, **2018**, 161, 388-399	8.4	100
242	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	8.4	99
241	Modified embedded-atom method interatomic potentials for the TiC and TiN binary systems. *Acta Materialia*, **2008**, 56, 3481-3489	8.4	98
240	The origin of (001) texture evolution in FePt thin films on amorphous substrates. *Journal of Applied Physics*, **2006**, 99, 053906	2.5	92
239	Thermodynamic Evaluation for the Y2O3BaOCuOx System. *Journal of the American Ceramic Society*, **1991**, 74, 78-84	3.8	90
238	Effect of annealing temperature on microstructural modification and tensile properties in 0.35 C5.5 Mn5.8 Al lightweight steel. *Acta Materialia*, **2013**, 61, 5050-5066	8.4	88
237	Atomistic Modeling of pure Mg and MgAl systems. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2009**, 33, 650-657	1.9	88
236	Origin of the plasticity in bulk amorphous alloys. *Journal of Materials Research*, **2007**, 22, 3087-3097	2.5	83
235	Deformation-induced nanocrystallization and its influence on work hardening in a bulk amorphous matrix composite. *Acta Materialia*, **2004**, 52, 1525-1533	8.4	82
234	Novel Co-rich high entropy alloys with superior tensile properties. *Materials Research Letters*, **2019**, 7, 82-88	7.4	80
233	Thermodynamic prediction of interface phases at Cu/solder joints. *Journal of Electronic Materials*, **1998**, 27, 1161-1166	1.9	78
232	Thermodynamic assessment of the Fe-Nb-Ti-C-N system. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2001**, 32, 2423-2439	2.3	77
231	Role of yttrium in activation of < c + a > slip in magnesium: An atomistic approach. *Scripta Materialia* , **2015**, 108, 104-108	5.6	76
230	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	5.6	73
229	Modified embedded-atom method interatomic potentials for the FeTiC and FeTiN ternary systems. *Acta Materialia*, **2009**, 57, 3140-3147	8.4	73
228	Thermodynamic assessments of the Sn-Zn and In-Zn binary systems. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **1996**, 20, 471-480	1.9	72
227	A modified embedded atom method interatomic potential for silicon. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2007**, 31, 95-104	1.9	71

226	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	1.9	70
225	Theory for plasticity of face-centered cubic metals. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 6560-5	11.5	69
224	Development of strong and ductile metastable face-centered cubic single-phase high-entropy alloys. *Acta Materialia*, **2019**, 181, 318-330	8.4	67
223	Effects of carbide precipitation on the strength and Charpy impact properties of low carbon MnNiMo bainitic steels. *Journal of Nuclear Materials*, **2001**, 297, 138-148	3.3	64
222	The phase stability of equiatomic CoCrFeMnNi high-entropy alloy: Comparison between experiment and calculation results. *Journal of Alloys and Compounds*, **2017**, 719, 189-193	5.7	62
221	A modified embedded atom method interatomic potential for carbon. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2005**, 29, 7-16	1.9	61
220	Thermodynamic calculation of LiH<->Li3AlH6<->LiAlH4 reactions. *Journal of Alloys and Compounds*, **2006**, 420, 286-290	5.7	58
219	A modified embedded-atom method interatomic potential for the FeN system: A comparative study with the FeC system. *Acta Materialia*, **2006**, 54, 4597-4607	8.4	58
218	A modified embedded-atom method interatomic potential for the FeH system. *Acta Materialia*, **2007**, 55, 6779-6788	8.4	55
217	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	5.3	53
216	Modified embedded-atom method interatomic potentials for MgX (X=Y, Sn, Ca) binary systems. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2015**, 48, 27-34	1.9	51
215	Modified embedded-atom method interatomic potentials for pure Mn and the FeMn system. *Acta Materialia*, **2009**, 57, 474-482	8.4	50
214	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		50
213	Molecular dynamics simulation of the crystallization of a liquid gold nanoparticle. *Journal of Crystal Growth*, **2003**, 250, 558-564	1.6	49
212	Calculation of Phase Diagrams for the YO1.5BaOCuOx System. *Journal of the American Ceramic Society*, **1989**, 72, 314-319	3.8	49
211	Effect of precipitates on the microstructure and mechanical properties of non-equiatomic CoCrFeNiMo medium-entropy alloys. *Journal of Alloys and Compounds*, **2019**, 781, 75-83	5.7	49
210	Design of new face-centered cubic high entropy alloys by thermodynamic calculation. *Metals and Materials International*, **2017**, 23, 839-847	2.4	48
209	An identification scheme of grain boundaries and construction of a grain boundary energy database. *Scripta Materialia*, **2011**, 64, 1152-1155	5.6	47

208	Prediction of composition dependency of glass forming ability of Mg□Cu□Y alloys by thermodynamic approach. *Scripta Materialia*, **2005**, 52, 969-972	5.6	47
207	Modified embedded-atom method interatomic potential for the Fe□Cu alloy system and cascade simulations on pure Fe and Fe□Cu alloys. *Physical Review B*, **2005**, 71,	3.3	45
206	Intergranular segregation of Cr in Ti-stabilized low-Cr ferritic stainless steel. *Scripta Materialia*, **2009**, 61, 1133-1136	5.6	44
205	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	2	43
204	Applications of computational thermodynamics □the extension from phase equilibrium to phase transformations and other properties. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2007**, 31, 53-74	1.9	43
203	Deformation-induced phase transformation of Co 20 Cr 26 Fe 20 Mn 20 Ni 14 high-entropy alloy during high-pressure torsion at 77 K. *Materials Letters*, **2017**, 202, 86-88	3.3	40
202	Ultrastrong duplex high-entropy alloy with 2 GPa cryogenic strength enabled by an accelerated martensitic transformation. *Scripta Materialia*, **2019**, 171, 67-72	5.6	40
201	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	2.3	40
200	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	3.2	38
199	A new strategy for designing immiscible medium-entropy alloys with excellent tensile properties. *Acta Materialia*, **2020**, 193, 71-82	8.4	38
198	Effects of aluminum content on cracking phenomenon occurring during cold rolling of three ferrite-based lightweight steel. *Acta Materialia*, **2013**, 61, 5626-5635	8.4	38
197	FCC to BCC transformation-induced plasticity based on thermodynamic phase stability in novel VCrFeCoNi medium-entropy alloys. *Scientific Reports*, **2019**, 9, 2948	4.9	38
196	Stress induced crystallization of amorphous materials and mechanical properties of nanocrystalline materials: a molecular dynamics simulation study. *Acta Materialia*, **2003**, 51, 6233-6240	8.4	37
195	A thermodynamic evaluation of the Fe-Cr-V-C system. *Journal of Phase Equilibria and Diffusion*, **1992**, 13, 349-364		37
194	Plastic Deformation Behavior of 40Fe□5Ni□15Cr□10Co□10V High-Entropy Alloy for Cryogenic Applications. *Metals and Materials International*, **2019**, 25, 277-284	2.4	37
193	Precipitation-driven metastability engineering of carbon-doped CoCrFeNiMo medium-entropy alloys at cryogenic temperature. *Scripta Materialia*, **2020**, 188, 140-145	5.6	36
192	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	2.3	35
191	Atomistic modeling of pure Li and Mg□i system. *Modelling and Simulation in Materials Science and Engineering*, **2012**, 20, 035005	2	35

190	A modified embedded-atom method interatomic potential for the Cu–Zr system. *Journal of Materials Research*, **2008**, 23, 1095-1104	2.5	35
189	Computation of grain boundary energies. *Modelling and Simulation in Materials Science and Engineering*, **2004**, 12, 621-632	2	35
188	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	2.3	35
187	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	1.9	33
186	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	5.3	33
185	An intermediate temperature creep model for Ni-based superalloys. *International Journal of Plasticity*, **2016**, 79, 153-175	7.6	33
184	Effects of Zn on <c + a> slip and grain boundary segregation of Mg alloys. *Scripta Materialia*, **2019**, 160, 39-43	5.6	33
183	Cryogenic-temperature fracture toughness analysis of non-equi-atomic V10Cr10Fe45Co20Ni15 high-entropy alloy. *Journal of Alloys and Compounds*, **2019**, 809, 151864	5.7	32
182	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	5.3	32
181	Atomistic modeling of pure Co and Co–Al system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2012**, 38, 7-16	1.9	32
180	Utilization of brittle σ 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	5.3	32
179	Size dependency of melting point of crystalline nano particles and nano wires: A thermodynamic modeling. *Metals and Materials International*, **2009**, 15, 531-537	2.4	31
178	Modified embedded-atom method interatomic potentials for the Fe–Nb and Fe–Ti binary systems. *Scripta Materialia*, **2008**, 59, 595-598	5.6	31
177	Thermodynamic Calculations on the Stability of Cu2S in Low Carbon Steels. *ISIJ International*, **2007**, 47, 163-171	1.7	31
176	Behavior of amorphous materials under hydrostatic pressures: A molecular dynamics simulation study. *Metals and Materials International*, **2004**, 10, 467-474	2.4	31
175	Effect of microstructure on the cleavage fracture strength of low carbon Mn–Ni–Mo bainitic steels. *Journal of Nuclear Materials*, **2004**, 324, 33-40	3.3	31
174	Effects of deformation-induced BCC martensitic transformation and twinning on impact toughness and dynamic tensile response in metastable VCrFeCoNi high-entropy alloy. *Journal of Alloys and Compounds*, **2019**, 785, 1056-1067	5.7	30
173	Microstructure and Mechanical Properties of High-Entropy Alloy CoCrFeMnNi Processed by High-Pressure Torsion at 77 K and 300 K. *Scientific Reports*, **2018**, 8, 11074	4.9	30

172	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	2.3	30
171	Modified embedded-atom method interatomic potential for the FePt alloy system. *Journal of Materials Research*, **2006**, 21, 199-208	2.5	30
170	Thermodynamic assessment of the NaH<->Na3AlH6<->NaAlH4 hydride system. *Journal of Alloys and Compounds*, **2006**, 424, 370-375	5.7	30
169	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	2.4	29
168	Atomistic modeling of the TiAl binary system. *Computational Materials Science*, **2016**, 119, 1-8	3.2	28
167	Effect of a high angle grain boundary on deformation behavior of Al nanopillars. *Scripta Materialia*, **2015**, 107, 5-9	5.6	27
166	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	5.3	26
165	Correlation between plasticity and other materials properties of CuZr bulk metallic glasses: An atomistic simulation study. *Acta Materialia*, **2011**, 59, 805-811	8.4	26
164	Sputter erosion of Si(0 0 1) using a new silicon MEAM potential and different thermostats. *Nuclear Instruments & Methods in Physics Research B*, **2007**, 255, 195-201	1.2	26
163	Thermodynamic approach for predicting the glass forming ability of amorphous alloys. *Intermetallics*, **2004**, 12, 1103-1107	3.5	26
162	Dynamic tension–compression asymmetry of martensitic transformation in austenitic Fe(0.4, 1.0)C18Mn steels for cryogenic applications. *Acta Materialia*, **2015**, 96, 37-46	8.4	25
161	Thermodynamic analysis of the effect of C, Mn and Al on microstructural evolution of lightweight steels. *Scripta Materialia*, **2013**, 68, 339-342	5.6	25
160	Shear localization and the plasticity of bulk amorphous alloys. *Scripta Materialia*, **2010**, 63, 231-234	5.6	25
159	Effect of stress on self-diffusion in bcc Fe: An atomistic simulation study. *Scripta Materialia*, **2010**, 63, 39-42	5.6	24
158	A modified embedded atom method interatomic potential for the CuNi system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2004**, 28, 125-132	1.9	24
157	Modified embedded-atom method interatomic potentials for the NiCo binary and the NiAlCo ternary systems. *Modelling and Simulation in Materials Science and Engineering*, **2015**, 23, 055004	2	23
156	Grain boundary engineering approach to improve hydrogen embrittlement resistance in Fe Mn C TWIP steel. *International Journal of Hydrogen Energy*, **2018**, 43, 10129-10140	6.7	23
155	A semi-empirical atomic potential for the Fe-Cr binary system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2001**, 25, 527-534	1.9	23

154	A thermodynamic study on the MnC and FeMn systems. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **1989**, 13, 345-354	1.9	23
153	Strain hardening of an amorphous matrix composite due to deformation- induced nanocrystallization during quasistatic compression. *Applied Physics Letters*, **2004**, 84, 2781-2783	3.4	22
152	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	2.3	22
151	Experimental investigation and phase diagram of CoCrMnNi□e system bridging high-entropy alloys and high-alloyed steels. *Journal of Alloys and Compounds*, **2019**, 785, 320-327	5.7	22
150	A thermodynamic evaluation of the Fe-Cr-Mn-C system. *Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science*, **1993**, 24, 1017-1025		21
149	Origin of radiation resistance in multi-principal element alloys. *Scientific Reports*, **2018**, 8, 16015	4.9	21
148	Effect of alloying elements (Al, Co, Fe, Ni) on the solubility of□hydrogen in vanadium: A thermodynamic calculation. *International Journal of Hydrogen Energy*, **2012**, 37, 7836-7847	6.7	20
147	Origin of hydrogen embrittlement in vanadium-based hydrogen separation membranes. *International Journal of Hydrogen Energy*, **2012**, 37, 13583-13593	6.7	20
146	Calculation of □□equilibria in SA508 grade 3 steels for intercritical heat treatment. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **1998**, 29, 1441-1447	2.3	20
145	Order□isorder character of PbTiO3. *Journal of Physics Condensed Matter*, **2008**, 20, 015224	1.8	20
144	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	5.7	20
143	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	5.3	19
142	Origin of unrealistic blunting during atomistic fracture simulations based on MEAM potentials. *Philosophical Magazine*, **2014**, 94, 1745-1753	1.6	19
141	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	1.9	19
140	{100} texture evolution in bcc Fe sheets - Computational design and experiments. *Acta Materialia*, **2016**, 106, 106-116	8.4	18
139	Three-dimensional Monte Carlo simulation for the effect of precipitates and sub-boundaries on abnormal grain growth. *Scripta Materialia*, **2012**, 66, 398-401	5.6	18
138	Atomistic modeling of the Cu□rA□g bulk metallic glass system. *Scripta Materialia*, **2009**, 61, 801-804	5.6	18
137	Prediction of Ti/Al2O3 interface reaction products by diffusion simulation. *Acta Materialia*, **1997**, 45, 3993-3999	8.4	18

136	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	5.3	18
135	Second nearest-neighbor modified embedded-atom method interatomic potentials for the Pt-M (M = Al, Co, Cu, Mo, Ni, Ti, V) binary systems. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2017**, 59, 131-141	1.9	17
134	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	1.6	17
133	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	2.3	17
132	Modified embedded-atom method interatomic potential for the Fe-Al system. *Journal of Physics Condensed Matter*, **2010**, 22, 175702	1.8	17
131	A modified embedded-atom method interatomic potential for Germanium. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2008**, 32, 34-42	1.9	17
130	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	1.9	16
129	Role of atomic-scale chemical heterogeneities in improving the plasticity of Cu-Zr-Ag bulk amorphous alloys. *Acta Materialia*, **2018**, 157, 209-217	8.4	16
128	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	1	16
127	Design of sustainable V-based hydrogen separation membranes based on grain boundary segregation. *International Journal of Hydrogen Energy*, **2014**, 39, 12031-12044	6.7	16
126	Atmospheric pressure plasma treatment on graphene grown by chemical vapor deposition. *Current Applied Physics*, **2015**, 15, 563-568	2.6	16
125	Microstructural Developments and Tensile Properties of Lean Fe-Mn-Al-C Lightweight Steels. *Jom*, **2014**, 66, 1857-1867	2.1	16
124	Tunable catalytic alloying eliminates stacking faults in compound semiconductor nanowires. *Nano Letters*, **2012**, 12, 855-60	11.5	16
123	Prediction of hydrogen permeability in V–Al and V–Ni alloys. *Journal of Membrane Science*, **2013**, 430, 234-241	9.6	16
122	Structural disordering of amorphous alloys: A molecular dynamics analysis. *Scripta Materialia*, **2009**, 61, 911-914	5.6	16
121	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	2.5	16
120	A modified embedded-atom method interatomic potential for indium. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2008**, 32, 82-88	1.9	16
119	A thermodynamic study on the FeMnC system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **1989**, 13, 355-365	1.9	16

118	A thermodynamic study on the V-C and FE-V systems. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **1991**, 15, 283-291	1.9	16
117	Enhanced high temperature hydrogen permeation characteristics of V□Ni alloy membranes containing a trace amount of yttrium. *Scripta Materialia*, **2016**, 116, 122-126	5.6	16
116	A numerical model to predict mechanical properties of Ni-base disk superalloys. *International Journal of Plasticity*, **2018**, 110, 123-144	7.6	15
115	Atomistic modeling of III-V nitrides: modified embedded-atom method interatomic potentials for GaN, InN and Ga(1-x)In(x)N. *Journal of Physics Condensed Matter*, **2009**, 21, 325801	1.8	15
114	Flat-surface, step-edge, facet□facet, and facet□step diffusion barriers in growth of a Pb mesa. *Surface Science*, **2008**, 602, 2284-2294	1.8	15
113	Numerical simulation of diffusional reactions between multiphase alloys with different matrix phases. *Scripta Materialia*, **1999**, 40, 573-579	5.6	15
112	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	1.9	14
111	Influence of hydrogen on the grain boundary crack propagation in bcc iron: A molecular dynamics simulation. *Computational Materials Science*, **2018**, 149, 424-434	3.2	14
110	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	3.2	14
109	Atomistic modeling of an impurity element and a metal-impurity system: pure P and Fe-P system. *Journal of Physics Condensed Matter*, **2012**, 24, 225002	1.8	14
108	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	1.3	14
107	Texture evolution by grain growth under a system of anisotropic grain boundary energy. *Scripta Materialia*, **1997**, 37, 1761-1767	5.6	14
106	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	5.3	13
105	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	2.3	13
104	Thermodynamic analysis for the size-dependence of nanowire composition grown by a vapor□liquid□solid method. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2008**, 32, 669-674	1.9	13
103	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	5.7	12
102	Effects of homogenization temperature on cracking during cold-rolling of Al0.5CoCrFeMnNi high-entropy alloy. *Materials Chemistry and Physics*, **2018**, 210, 187-191	4.4	12
101	An approach for screening single phase high-entropy alloys using an in-house thermodynamic database. *Intermetallics*, **2018**, 101, 56-63	3.5	12

100	Modified embedded-atom method interatomic potentials for pure Y and the V–Pd–Y ternary system. *Modelling and Simulation in Materials Science and Engineering*, **2013**, 21, 085008	2	12
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