

Munekazu Ohno

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Phase-field study on an array of tilted columnar dendrites during the directional solidification of a binary alloy. <i>Computational Materials Science</i> , 2022, 203, 111143.	3.0	11
2	Time invariance of three-dimensional morphology of equiaxed dendrite: A phase-field study. <i>Computational Materials Science</i> , 2022, 204, 111173.	3.0	3
3	Inverse analysis of anisotropy of solid-liquid interfacial free energy based on machine learning. <i>Computational Materials Science</i> , 2022, 207, 111294.	3.0	0
4	Application of Heat Transfer Coefficient Estimation Using Data Assimilation and a 1-D Solidification Model to 3-D Solidification Simulation. <i>ISIJ International</i> , 2022, 62, 1666-1673.	1.4	1
5	Large-scale phase-field study of anisotropic grain growth: Effects of misorientation-dependent grain boundary energy and mobility. <i>Computational Materials Science</i> , 2021, 186, 109992.	3.0	29
6	In-situ observation of abnormal grain growth in a low-alloyed carbon steel using SEM-EBSD. <i>Materialia</i> , 2021, 15, 100985.	2.7	3
7	Configurational kinetics studied by Path Probability Method. <i>Progress in Materials Science</i> , 2021, 120, 100765.	32.8	6
8	Uniquely selected primary dendrite arm spacing during competitive growth of columnar grains in Al-Cu alloy. <i>Journal of Crystal Growth</i> , 2021, 558, 126014.	1.5	8
9	Effects of Cooling Rate after Hot Forging on Precipitation of Fine Particles during Subsequent Normalizing and Austenite Grain Growth during Carburization of Al- and Nb-microalloyed Case-hardening Steel. <i>ISIJ International</i> , 2021, 61, 1964-1970.	1.4	4
10	Ostwald ripening under temperature gradient: A phase-field study. <i>Journal of Applied Physics</i> , 2021, 130, 015109.	2.5	0
11	Bayesian Data Assimilation of Temperature Dependence of Solid-Liquid Interfacial Properties of Nickel. <i>Nanomaterials</i> , 2021, 11, 2308.	4.1	11
12	Novel estimation method for anisotropic grain boundary properties based on Bayesian data assimilation and phase-field simulation. <i>Materials and Design</i> , 2021, 210, 110089.	7.0	13
13	Large-scale phase-field lattice Boltzmann study on the effects of natural convection on dendrite morphology formed during directional solidification of a binary alloy. <i>Computational Materials Science</i> , 2020, 171, 109209.	3.0	42
14	Microstructure refinement and mechanical properties improvement of Al-Si-Fe alloys by hot extrusion using a specially designed high-strain die. <i>Journal of Materials Processing Technology</i> , 2020, 277, 116447.	6.3	10
15	Parameter estimation for heat transfer analysis during casting processes based on ensemble Kalman filter. <i>International Journal of Heat and Mass Transfer</i> , 2020, 149, 119232.	4.8	10
16	Development of High Corrosion- and Wear-Resistant Al-Si Alloy Coating on AZ80 Mg Alloy by Hot Extrusion. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 6355-6362.	2.5	3
17	Overgrowth behavior at converging grain boundaries during competitive grain growth: A two-dimensional phase-field study. <i>International Journal of Heat and Mass Transfer</i> , 2020, 160, 120196.	4.8	9
18	Bayesian inference of solid-liquid interfacial properties out of equilibrium. <i>Physical Review E</i> , 2020, 101, 052121.	2.1	22

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19	Two-dimensional large-scale phase-field lattice Boltzmann simulation of polycrystalline equiaxed solidification with motion of a massive number of dendrites. <i>Computational Materials Science</i> , 2020, 178, 109639.	3.0	39
20	Effects of Concentrations of Micro-alloying Elements and Hot-forging Temperature on Austenite Grain Structure Formed during Carburization of Case-hardening Steel. <i>ISIJ International</i> , 2020, 60, 2549-2557.	1.4	7
21	Permeability tensor for columnar dendritic structures: Phase-field and lattice Boltzmann study. <i>Acta Materialia</i> , 2020, 188, 282-287.	7.9	27
22	Accuracy Evaluation of Phase-field Models for Grain Growth Simulation with Anisotropic Grain Boundary Properties. <i>ISIJ International</i> , 2020, 60, 160-167.	1.4	19
23	Estimation of time-dependent heat transfer coefficient in unidirectional casting using a numerical model coupled with solidification analysis and data assimilation. <i>International Journal of Heat and Mass Transfer</i> , 2020, 150, 119222.	4.8	13
24	Phase-field simulation of abnormal grain growth during carburization in Nb-added steel. <i>Computational Materials Science</i> , 2020, 177, 109558.	3.0	12
25	Quantitative Phase-field Modeling and Simulations of Solidification Microstructures. <i>ISIJ International</i> , 2020, 60, 2745-2754.	1.4	25
26	High Performance Computing of Solidification Microstructures and Emergence of Cross-scale Approach. <i>Materia Japan</i> , 2020, 59, 139-144.	0.1	0
27	Development of Microstructure Simulation System in SIP-Materials Integration Projects. <i>Materials Transactions</i> , 2020, 61, 2047-2051.	1.2	13
28	Austenite memory during reverse transformation of steels at different heating rates. <i>Materialia</i> , 2019, 7, 100409.	2.7	3
29	Microstructure evolution during superplastic deformation of an Al-coated Mg alloy sheet. <i>Journal of Alloys and Compounds</i> , 2019, 805, 436-443.	5.5	11
30	Effects of Fine Precipitates on Austenite Grain Refinement of Micro-alloyed Steel during Cyclic Heat Treatment. <i>ISIJ International</i> , 2019, 59, 2098-2104.	1.4	13
31	Acceleration of phase-field lattice Boltzmann simulation of dendrite growth with thermosolutal convection by the multi-GPUs parallel computation with multiple mesh and time step method. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2019, 27, 054004.	2.0	19
32	Competitive growth during directional solidification of a binary alloy with natural convection: two-dimensional phase-field study. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2019, 27, 054001.	2.0	13
33	Large-scale phase-field simulation of three-dimensional isotropic grain growth in polycrystalline thin films. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2019, 27, 054003.	2.0	14
34	Micrometer-scale molecular dynamics simulation of microstructure formation linked with multi-phase-field simulation in same space scale. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2019, 27, 054002.	2.0	14
35	A parametric study of morphology selection in equiaxed dendritic solidification. <i>Computational Materials Science</i> , 2019, 162, 76-81.	3.0	16
36	Simulation method based on phase-field lattice Boltzmann model for long-distance sedimentation of single equiaxed dendrite. <i>Computational Materials Science</i> , 2019, 164, 39-45.	3.0	25

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37	Multi-Phase-Field Modeling of Transformation Kinetics at Multiple Scales and Its Application to Welding of Steel. <i>Materials Transactions</i> , 2019, 60, 170-179.	1.2	9
38	Importance of microstructural evolution on prediction accuracy of microsegregation in Al-Cu and Fe-Mn alloys. <i>International Journal of Heat and Mass Transfer</i> , 2019, 132, 1004-1017.	4.8	16
39	Permeability prediction for flow normal to columnar solidification structures by large-scale simulations of phase-field and lattice Boltzmann methods. <i>Acta Materialia</i> , 2019, 164, 237-249.	7.9	37
40	Fabrication of Al-Coated Mg-Li Alloy Sheet and Investigation of Its Properties. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019, 32, 169-177.	2.9	13
41	Development of Microstructure Simulation System in SIP-Materials Integration Projects. <i>Materia Japan</i> , 2019, 58, 494-497.	0.1	2
42	Phase-field lattice Boltzmann simulations of multiple dendrite growth with motion, collision, and coalescence and subsequent grain growth. <i>Computational Materials Science</i> , 2018, 147, 124-131.	3.0	66
43	Grain growth kinetics in submicrometer-scale molecular dynamics simulation. <i>Acta Materialia</i> , 2018, 153, 108-116.	7.9	36
44	Coatings on Mg alloys and their mechanical properties: A review. <i>Journal of Materials Science and Technology</i> , 2018, 34, 1119-1126.	10.7	60
45	Three-dimensional morphologies of inclined equiaxed dendrites growing under forced convection by phase-field-lattice Boltzmann method. <i>Journal of Crystal Growth</i> , 2018, 483, 147-155.	1.5	39
46	Annealing Behavior of Surface-Locally Cold-Deformed Low-Carbon Steel with a Large Strain Gradient. <i>Metals</i> , 2018, 8, 976.	2.3	1
47	Brazed Bonding between SiAlON and Heat-Resistant Alloys with Application of Filler Materials. <i>Materials Transactions</i> , 2018, 59, 969-975.	1.2	0
48	Effect of Cold-Deformation on Austenite Grain Growth Behavior in Solution-Treated Low Alloy Steel. <i>Metals</i> , 2018, 8, 1004.	2.3	4
49	Coating on Magnesium Alloy with Super Duralumin by Hot Extrusion and Evaluation of Its Surface Properties. <i>Materials Transactions</i> , 2018, 59, 432-436.	1.2	3
50	Fabrication of Unidirectionally Orientated Carbon Fiber Reinforced Cu-Based Composites by Hot Extrusion and Evaluation of Their Thermal Properties. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2018, 82, 125-129.	0.4	3
51	Macrosegregation simulation model based on Lattice-Boltzmann method with high computational efficiency. <i>International Journal of Heat and Mass Transfer</i> , 2018, 127, 561-570.	4.8	8
52	Advent of Cross-Scale Modeling: High-Performance Computing of Solidification and Grain Growth. <i>Advanced Theory and Simulations</i> , 2018, 1, 1800065.	2.8	40
53	Correlation between three-dimensional and cross-sectional characteristics of ideal grain growth: large-scale phase-field simulation study. <i>Journal of Materials Science</i> , 2018, 53, 15165-15180.	3.7	12
54	Low temperature superplasticity of a dual-phase Mg-Li-Zn alloy processed by a multi-mode deformation process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 737, 61-68.	5.6	27

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55	Bridging molecular dynamics and phase-field methods for grain growth prediction. Computational Materials Science, 2018, 152, 118-124.	3.0	21
56	Competitive grain growth during directional solidification of a polycrystalline binary alloy: Three-dimensional large-scale phase-field study. Materialia, 2018, 1, 104-113.	2.7	57
57	Acceleration of Macroseggregation Simulation Based on Lattice Boltzmann Method. ISIJ International, 2018, 58, 114-122.	1.4	3
58	Multi-GPUs parallel computation of dendrite growth in forced convection using the phase-field-lattice Boltzmann model. Journal of Crystal Growth, 2017, 474, 154-159.	1.5	81
59	Heterogeneity in homogeneous nucleation from billion-atom molecular dynamics simulation of solidification of pure metal. Nature Communications, 2017, 8, 10.	12.8	219
60	Numerical testing of quantitative phase-field models with different polynomials for isothermal solidification in binary alloys. Journal of Computational Physics, 2017, 335, 621-636.	3.8	20
61	Molecular dynamics simulations investigating consecutive nucleation, solidification and grain growth in a twelve-million-atom Fe-system. Journal of Crystal Growth, 2017, 474, 140-145.	1.5	23
62	Phase-field-lattice Boltzmann studies for dendritic growth with natural convection. Journal of Crystal Growth, 2017, 474, 146-153.	1.5	61
63	Bcc / B2 phase equilibria and phase transformation from B2 to $\hat{\Gamma}$ in refractory Nb-X(Pd, Rh, Ir)-Al. MRS Advances, 2017, 2, 1335-1340.	0.9	0
64	Variational formulation of a quantitative phase-field model for nonisothermal solidification in a multicomponent alloy. Physical Review E, 2017, 96, 033311.	2.1	31
65	Ultra-large-scale phase-field simulation study of ideal grain growth. Npj Computational Materials, 2017, 3, .	8.7	77
66	Parameter Estimation in Heat Conduction Problem of Casting Processes Based on Data Assimilation. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 755-762.	0.4	5
67	A Molecular Dynamics Study of Partitionless Solidification and Melting of Al-Cu Alloys. ISIJ International, 2017, 57, 1774-1779.	1.4	14
68	Prediction of Microseggregation Behavior in Fe-based Alloys Based on Machine Learning. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 711-719.	0.4	5
69	Fabrication of Carbon Fiber Oriented Al-Based Composites by Hot Extrusion and Evaluation of Their Thermal Conductivity. Materials Transactions, 2017, 58, 938-944.	1.2	6
70	Prediction of Microseggregation Based on Machine Learning and Its Extension to a Macroseggregation Simulation. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 720-729.	0.4	3
71	Brazed Bonding between SiAlON and Heat-Resistant Alloys with Application of Filler Materials. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2017, 81, 143-149.	0.4	0
72	Preface to the Special Issue Entitled "Dynamics in Solid-Liquid Coexistence and Controlling of Segregation during Solidification". Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 667-667.	0.4	0

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73	Coating on Magnesium Alloy with Super Duralumin by Hot Extrusion and Evaluation of Its Surface Properties. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2017, 81, 389-393.	0.4	1
74	Phase-field models of dendrites: Past, current and future. The Proceedings of the Computational Mechanics Conference, 2017, 2017.30, 150.	0.0	0
75	Large-scale Phase-field Studies of Three-dimensional Dendrite Competitive Growth at the Converging Grain Boundary during Directional Solidification of a Bicrystal Binary Alloy. ISIJ International, 2016, 56, 1427-1435.	1.4	39
76	Fabrication of Carbon Fiber Oriented Al-Based Composites by Hot Extrusion and Evaluation of Their Thermal Conductivity. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2016, 80, 640-645.	0.4	4
77	Grain Refinement and Ductility Improvement by Hot Extrusion Using a Heteromorphic Die with Small Holes. Materials Transactions, 2016, 57, 927-934.	1.2	2
78	Primary arm array during directional solidification of a single-crystal binary alloy: Large-scale phase-field study. Acta Materialia, 2016, 118, 230-243.	7.9	87
79	Variational formulation and numerical accuracy of a quantitative phase-field model for binary alloy solidification with two-sided diffusion. Physical Review E, 2016, 93, 012802.	2.1	31
80	Wafer-scale fabrication and growth dynamics of suspended graphene nanoribbon arrays. Nature Communications, 2016, 7, 11797.	12.8	43
81	The Relationship between the Spark Plasma Sintering Temperature and Mechanical Properties of Combustion-Synthesized α - and β -SiAlON. Materials Transactions, 2016, 57, 1593-1596.	1.2	1
82	Submicrometer-scale molecular dynamics simulation of nucleation and solidification from undercooled melt: Linkage between empirical interpretation and atomistic nature. Acta Materialia, 2016, 105, 328-337.	7.9	86
83	Two-dimensional phase-field study of competitive grain growth during directional solidification of polycrystalline binary alloy. Journal of Crystal Growth, 2016, 442, 14-24.	1.5	76
84	Variational formulation of quantitative phase-field model. The Proceedings of the Computational Mechanics Conference, 2016, 2016.29, 4_133.	0.0	0
85	Homogeneous nucleation and microstructure evolution in million-atom molecular dynamics simulation. Scientific Reports, 2015, 5, 13534.	3.3	84
86	GPU phase-field lattice Boltzmann simulations of growth and motion of a binary alloy dendrite. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012066.	0.6	39
87	Microsegregation in multicomponent alloy analysed by quantitative phase-field model. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012075.	0.6	6
88	Grain Refinement and Ductility Improvement by Hot Extrusion Using a Heteromorphic Die with Small Holes. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 183-190.	0.4	0
89	Relationships between Spark Plasma Sintering Temperature and Mechanical Properties of Combustion-Synthesized α - and β -SiAlON. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 191-194.	0.4	6
90	Microstructural Features and Formation Processes of As-cast Austenite Grain Structures in Hypoperitectic Carbon Steels. ISIJ International, 2015, 55, 2374-2382.	1.4	14

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91	Solidification in a Supercomputer: From Crystal Nuclei to Dendrite Assemblages. <i>Jom</i> , 2015, 67, 1793-1804.	1.9	92
92	Phase-Field Simulations and Analysis of Effect of Dispersed Particles on Migration of Delta to Gamma Transformation Interface. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 981-988.	2.2	6
93	Increase of Austenite Grain Coarsening Temperature in Banded Ferrite/Pearlite Steel by Cold Deformation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 32-36.	2.2	3
94	A role of interfacial energy balance in delta to gamma transformation kinetics in carbon steel with dispersed second phase particles analyzed by phase-field simulation. <i>Computational Materials Science</i> , 2015, 106, 188-192.	3.0	1
95	A phase-field-lattice Boltzmann method for modeling motion and growth of a dendrite for binary alloy solidification in the presence of melt convection. <i>Journal of Computational Physics</i> , 2015, 298, 29-40.	3.8	117
96	Sensitivity analysis for thickness uniformity of Al coating layer in extrusion of Mg/Al clad bar. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 80, 507-513.	3.0	10
97	Physical and numerical modelling of backward extrusion of Mg alloy with Al coating. <i>CIRP Annals - Manufacturing Technology</i> , 2015, 64, 253-256.	3.6	4
98	GPU-accelerated 3D phase-field simulations of dendrite competitive growth during directional solidification of binary alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015, 84, 012063.	0.6	25
99	Corrosion Resistance and Tensile Property of Al-Coated Mg-Li Alloy Produced by Hot Extrusion. <i>Key Engineering Materials</i> , 2015, 641, 69-80.	0.4	0
100	Experimental Verification of a Critical Condition for the Formation of As-Cast Coarse Columnar Austenite Grain Structure in a Hyperperitectic Carbon Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 5240-5247.	2.2	2
101	Misorientation/local plastic strain manifestations in chemical etching color. <i>Micron</i> , 2014, 59, 28-32.	2.2	2
102	Million-atom molecular dynamics simulation on spontaneous evolution of anisotropy in solid nucleus during solidification of iron. <i>Scripta Materialia</i> , 2014, 86, 20-23.	5.2	29
103	Abnormal Grain Growth in Austenite Structure Reversely Transformed from Ferrite/Pearlite-Banded Structure. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 4623-4634.	2.2	27
104	Two-dimensional phase-field simulations of dendrite competitive growth during the directional solidification of a binary alloy bicrystal. <i>Acta Materialia</i> , 2014, 81, 272-283.	7.9	129
105	Superplastic behavior of Al-coated Mg alloy sheet. <i>Journal of Alloys and Compounds</i> , 2014, 601, 179-185.	5.5	25
106	Advances in Phase-field Simulation of Solidification Microstructure. <i>Materia Japan</i> , 2014, 53, 458-461.	0.1	0
107	Unexpected selection of growing dendrites by very-large-scale phase-field simulation. <i>Journal of Crystal Growth</i> , 2013, 382, 21-25.	1.5	109
108	On the kinetics of TiAl ₃ intermetallic layer formation in the titanium and aluminum diffusion couple. <i>Intermetallics</i> , 2013, 32, 297-302.	3.9	117

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109	Quantification of local plastic strain distribution beneath surface of deformed iron. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 564, 169-175.	5.6	6
110	A critical condition for the formation of a coarse columnar $\hat{\Gamma}^3$ grain structure in a peritectic solidified carbon steel. <i>Acta Materialia</i> , 2013, 61, 7334-7341.	7.9	10
111	Theoretical and numerical investigations on grain boundary migration due to inverse pinning. <i>Computational Materials Science</i> , 2013, 79, 558-563.	3.0	2
112	Existence or nonexistence of thermal pinning effect in grain growth under temperature gradient. <i>Computational Materials Science</i> , 2013, 69, 7-13.	3.0	14
113	Effect of strain rate on the plastic strain gradient beneath the deformed surface of iron. <i>Journal of Physics: Conference Series</i> , 2013, 419, 012037.	0.4	0
114	TiC Coating on Titanium by Carbonization Reaction Using Spark Plasma Sintering. <i>Materials Transactions</i> , 2013, 54, 2098-2101.	1.2	19
115	Effects of Ti Addition on Austenite Grain Growth during Reheating of As-Cast 0.2 mass% Carbon Steel. <i>ISIJ International</i> , 2012, 52, 1832-1840.	1.4	7
116	Combustion synthesis of TiB ₂ -based hard material cemented by Fe-Al intermetallics. <i>Powder Metallurgy</i> , 2012, 55, 162-167.	1.7	5
117	Quantitative phase-field modeling of nonisothermal solidification in dilute multicomponent alloys with arbitrary diffusivities. <i>Physical Review E</i> , 2012, 86, 051603.	2.1	68
118	Phase Evolution, Microstructure and Hardness of TiB ₂ -based Co-containing Composite by SHS under Pseudo-isostatic Pressure. <i>ISIJ International</i> , 2012, 52, 1698-1704.	1.4	10
119	Effects of Second Phase Particle Dispersion on Kinetics of Isothermal Peritectic Transformation in Fe-C Alloy. <i>ISIJ International</i> , 2012, 52, 434-440.	1.4	9
120	Effects of Second Phase Particles on Migration of $\hat{\Gamma}^\alpha/\hat{\Gamma}^\gamma$ Interface during Isothermal $\hat{\Gamma}^\alpha$ to $\hat{\Gamma}^\gamma$ Transformation. <i>ISIJ International</i> , 2012, 52, 1841-1847.	1.4	4
121	Austenite Grain Growth in Peritectic Solidified Carbon Steels Analyzed by Phase-Field Simulation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 2031-2042.	2.2	8
122	Transition of solidification mode and the as-cast $\hat{\Gamma}^3$ grain structure in hyperperitectic carbon steels. <i>Acta Materialia</i> , 2012, 60, 2927-2938.	7.9	11
123	Aluminum Coating on Magnesium-Based Alloy by Hot Extrusion and Its Characteristics. <i>Materials Transactions</i> , 2012, 53, 1034-1041.	1.2	13
124	Suppression of Coarse Columnar Grain Formation in As-cast Austenite Structure of a Hyperperitectic Carbon Steel by Nb Addition. <i>ISIJ International</i> , 2011, 51, 1831-1837.	1.4	7
125	Aluminum Coating on Magnesium-Based Alloy by Hot Extrusion and Its Characteristics. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2011, 75, 633-639.	0.4	3
126	Formation conditions of coarse columnar austenite grain structure in peritectic carbon steels by the discontinuous grain growth mechanism. <i>Acta Materialia</i> , 2011, 59, 5700-5709.	7.9	27

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127	Formation mechanism of coarse columnar $\hat{\Gamma}^3$ grains in as-cast hyperperitectic carbon steels. Acta Materialia, 2011, 59, 3334-3342.	7.9	28
128	Combustion Synthesis of TiC-TiB ₂ -Based Cermets from Elemental Powders. Advances in Tribology, 2011, 2011, 1-8.	2.1	2
129	Changes in microstructure and mechanical properties of cast Al-Si alloy due to hot rolling. Keikinzoku/Journal of Japan Institute of Light Metals, 2010, 60, 7-11.	0.4	3
130	Methodological Progress for Computer Simulation of Solidification and Casting. ISIJ International, 2010, 50, 1724-1734.	1.4	9
131	Quantitative phase-field modeling for two-phase solidification process involving diffusion in the solid. Acta Materialia, 2010, 58, 5749-5758.	7.9	75
132	Diffusion-controlled peritectic reaction process in carbon steel analyzed by quantitative phase-field simulation. Acta Materialia, 2010, 58, 6134-6141.	7.9	39
133	Effects of Cr Addition on Coarse Columnar Austenite Structure in As-Cast 0.2 mass% Carbon Steel. ISIJ International, 2010, 50, 1959-1964.	1.4	6
134	As-cast Austenite Grain Structure in Al Added 0.2 wt% Carbon Steel. ISIJ International, 2010, 50, 231-238.	1.4	5
135	Motion and Morphology of Triple Junction in Peritectic Reaction Analyzed by Quantitative Phase-field Model. ISIJ International, 2010, 50, 1879-1885.	1.4	13
136	Effects of Al and P Additions on As-cast Austenite Grain Structure in 0.2 mass% Carbon Steel. ISIJ International, 2010, 50, 1965-1971.	1.4	10
137	Combustion Synthesis of Titanium-Based Cemented Carbides. Materials Science Forum, 2010, 638-642, 1860-1865.	0.3	1
138	Effects of Addition of Titanium and Boron on Columnar Austenite Grain in Carbon Steel. ISIJ International, 2009, 49, 1367-1371.	1.4	5
139	Numerical Analysis on Columnar-to-equiaxed Transition of $\hat{\Gamma}$ -Ferrite Dendrite in Carbon Steel Induced by Titanium Carbonitride Particles. ISIJ International, 2009, 49, 1568-1574.	1.4	5
140	Effects of Ti Addition on As-cast $\hat{\Gamma}^3$ Grain Structure in Hyper-peritectic Carbon Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2009, 95, 629-635.	0.4	3
141	Quantitative phase-field modeling for dilute alloy solidification involving diffusion in the solid. Physical Review E, 2009, 79, 031603.	2.1	187
142	Phase-field Simulation of Microstructural Evolution Process in Alloy System. Materia Japan, 2009, 48, 375-378.	0.1	0
143	Thermodynamic Calculation of Phase Equilibria in As-Fe-In Ternary System Based on CALPHAD Approach. Materials Transactions, 2009, 50, 1202-1207.	1.2	3
144	Combustion synthesis of TiC-based cemented carbide alloy and effect of preheating treatment on porosity. Keikinzoku/Journal of Japan Institute of Light Metals, 2009, 59, 2-6.	0.4	1

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145	Refinement of As-cast Austenite Grain in Carbon Steel by Addition of Titanium. ISIJ International, 2009, 49, 1362-1366.	1.4	10
146	Thermodynamic modeling of the system As-Fe combined with first-principles total energy calculations. Journal of Crystal Growth, 2008, 310, 2751-2759.	1.5	6
147	Time-resolved and space-resolved Monte-Carlo analyses on spin relaxation anisotropy in InAs heterostructure. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1539-1541.	2.7	0
148	Phase equilibria, thermodynamics and solidification microstructures of Mg-Sn-Ca alloys, Part 1: Experimental investigation and thermodynamic modeling of the ternary Mg-Sn-Ca system. Intermetallics, 2008, 16, 299-315.	3.9	86
149	Phase equilibria, thermodynamics and solidification microstructures of Mg-Sn-Ca alloys, Part 2: Prediction of phase formation in Mg-rich Mg-Sn-Ca cast alloys. Intermetallics, 2008, 16, 316-321.	3.9	68
150	Datta-Das-type spin-field-effect transistor in the nonballistic regime. Physical Review B, 2008, 77, .	3.2	29
151	Refinement of As-cast Austenite Microstructure in S45C Steel by Titanium Addition. ISIJ International, 2008, 48, 1373-1379.	1.4	21
152	Titanium aluminide coating on titanium surface using aluminum plating and surface melting. Keikinzoku/Journal of Japan Institute of Light Metals, 2008, 58, 656-661.	0.4	2
153	Refinement of As-cast Austenite Grain in Carbon Steel by Addition of Titanium. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2008, 94, 491-495.	0.4	2
154	Vanishing of inhomogeneous spin relaxation in InAs-based field-effect transistor structures. Physical Review B, 2007, 75, .	3.2	19
155	From Phase Equilibria to Transformation Dynamics. Defect and Diffusion Forum, 2007, 263, 21-30.	0.4	1
156	Interface between quantum-mechanical-based approaches, experiments, and CALPHAD methodology. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2007, 31, 4-27.	1.6	108
157	Micromagnetic simulation of magnetization reversal process and stray field behavior in Fe thin film wire. Journal of Applied Physics, 2007, 102, 123908.	2.5	2
158	Reassessment of the Al-Mn system and a thermodynamic description of the Al-Mg-Mn system. International Journal of Materials Research, 2007, 98, 855-871.	0.3	106
159	Critical Estimation of Relaxation Coefficient in TDGL Equation Based on Path Probability Method. Materials Transactions, 2006, 47, 2718-2724.	1.2	11
160	Liquidus and solidus temperatures of Mg-rich Mg-Al-Mn-Zn alloys. Acta Materialia, 2006, 54, 3883-3891.	7.9	83
161	Thermodynamic modeling of the Ca-Sn system based on finite temperature quantities from first-principles and experiment. Acta Materialia, 2006, 54, 4939-4951.	7.9	34
162	Phase equilibria and solidification of Mg-rich Mg-Al-Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 421, 328-337.	5.6	64

#	ARTICLE	IF	CITATIONS
163	First-principles calculations of phase equilibria and transformation dynamics of Fe-based alloys. <i>Journal of Phase Equilibria and Diffusion</i> , 2006, 27, 47-53.	1.4	20
164	Controlling Microstructure in Magnesium Alloys: A Combined Thermodynamic, Experimental and Simulation Approach. <i>Advanced Engineering Materials</i> , 2006, 8, 241-247.	3.5	43
165	Aspects of Quality Assurance in a Thermodynamic Mg Alloy Database. <i>Advanced Engineering Materials</i> , 2005, 7, 1142-1149.	3.5	46
166	Towards the First-Principles Investigation of Ordering Dynamics. <i>Materials Science Forum</i> , 2005, 475-479, 3075-3080.	0.3	6
167	Thermodynamic assessment of Mg-Al-Mn phase equilibria, focusing on Mg-rich alloys. <i>International Journal of Materials Research</i> , 2005, 96, 857-869.	0.8	33
168	Iteration calculation for path probability method with spin kinetics. <i>Physical Review B</i> , 2005, 72, .	3.2	6
169	Experimental Investigation and Thermodynamic Calculation of Binary Mg-Mn Phase Equilibria. <i>Journal of Phase Equilibria and Diffusion</i> , 2005, 26, 234-239.	1.4	4
170	Relaxation kinetics of the long-range order parameter in a non-uniform system studied by the phase field method using the free energy obtained by the cluster variation method. <i>Philosophical Magazine</i> , 2003, 83, 315-328.	1.6	22
171	Theoretical Investigation of Coarsening Process of L1 ₀ -Ordered Domain Based on Phase Field Method and Cluster Variation Method. <i>Materials Transactions</i> , 2002, 43, 2189-2192.	1.2	7
172	Disorder-L1 ₀ Transition Investigated by Phase Field Method with CVM Local Free Energy. <i>Materials Transactions</i> , 2001, 42, 2033-2041.	1.2	14
173	Phase field calculations with CVM free energy for a disorder-B2 transition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 312, 50-56.	5.6	19
174	Transient Behavior of a Stress-Strain Curve within Cottrell-Stokes Law. <i>Materials Transactions, JIM</i> , 1999, 40, 875-878.	0.9	1
175	Multi-Scale Phase Field Simulation of Disorder-Order Transition, Combined with Cluster Variation and Path Probability Methods. <i>Materials Science Forum</i> , 0, 631-632, 401-406.	0.3	0
176	Effects of Strain-Graded Plastic Deformation on Mechanical Properties of Metals. <i>Advances in Science and Technology</i> , 0, , .	0.2	0
177	TiAl ₃ Formation in the Titanium-Aluminum Diffusion Couple. <i>Defect and Diffusion Forum</i> , 0, 322, 185-194.	0.4	7