Munekazu Ohno

List of Publications by Year
in descending order

177 papers	4,188 citations	109321 35 h-index	138484 58 g-index
178 all docs	178 docs citations	178 times ranked	2490 citing authors

#	Article	IF	Citations
1	Heterogeneity in homogeneous nucleation from billion-atom molecular dynamics simulation of solidification of pure metal. Nature Communications, 2017, 8, 10.	12.8	219
2	Quantitative phase-field modeling for dilute alloy solidification involving diffusion in the solid. Physical Review E, 2009, 79, 031603.	2.1	187
3	Two-dimensional phase-field simulations of dendrite competitive growth during the directional solidification of a binary alloy bicrystal. Acta Materialia, 2014, 81, 272-283.	7.9	129
4	On the kinetics of TiAl3 intermetallic layer formation in the titanium and aluminum diffusion couple. Intermetallics, 2013, 32, 297-302.	3.9	117
5	A phase-field-lattice Boltzmann method for modeling motion and growth of a dendrite for binary alloy solidification in the presence of melt convection. Journal of Computational Physics, 2015, 298, 29-40.	3.8	117
6	Unexpected selection of growing dendrites by very-large-scale phase-field simulation. Journal of Crystal Growth, 2013, 382, 21-25.	1.5	109
7	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
8	Reassessment of the Alâ€“Mn system and a thermodynamic description of the Alâ€“Mgâ€“Mn system. International Journal of Materials Research, 2007, 98, 855-871.	0.3	106
9	Solidification in a Supercomputer: From Crystal Nuclei to Dendrite Assemblages. Jom, 2015, 67, 1793-1804.	1.9	92
10	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
11	Phase equilibria, thermodynamics and solidification microstructures of Mgâ€“Snâ€“Ca alloys, Part 1: Experimental investigation and thermodynamic modeling of the ternary Mgâ€“Snâ€“Ca system. Intermetallics, 2008, 16, 299-315.	3.9	86
12	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
13	Homogeneous nucleation and microstructure evolution in million-atom molecular dynamics simulation. Scientific Reports, 2015, 5, 13534.	3.3	84
14	Liquidus and solidus temperatures of Mg-rich Mgâ€“Alâ€“Mnâ€“Zn alloys. Acta Materialia, 2006, 54, 3883-3891.	7.9	83
15	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
16	Ultra-large-scale phase-field simulation study of ideal grain growth. Npj Computational Materials, 2017, 3, .	8.7	77
17	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
18	Quantitative phase-field modeling for two-phase solidification process involving diffusion in the solid. Acta Materialia, 2010, 58, 5749-5758.	7.9	75

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19	Phase equilibria, thermodynamics and solidification microstructures of Mgâ€“Snâ€“Ca alloys, Part 2: Prediction of phase formation in Mg-rich Mgâ€“Snâ€“Ca cast alloys. Intermetallics, 2008, 16, 316-321.	3.9	68
20	Quantitative phase-field modeling of nonisothermal solidification in dilute multicomponent alloys with arbitrary diffusivities. Physical Review E, 2012, 86, 051603.	2.1	68
21	Phase-field lattice Boltzmann simulations of multiple dendrite growth with motion, collision, and coalescence and subsequent grain growth. Computational Materials Science, 2018, 147, 124-131.	3.0	66
22	Phase equilibria and solidification of Mg-rich Mgâ€“Alâ€“Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 421, 328-337.	5.6	64
23	Phase-field-lattice Boltzmann studies for dendritic growth with natural convection. Journal of Crystal Growth, 2017, 474, 146-153.	1.5	61
24	Coatings on Mg alloys and their mechanical properties: A review. Journal of Materials Science and Technology, 2018, 34, 1119-1126.	10.7	60
25	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
26	Aspects of Quality Assurance in a Thermodynamic Mg Alloy Database. Advanced Engineering Materials, 2005, 7, 1142-1149.	3.5	46
27	Controlling Microstructure in Magnesium Alloys: A Combined Thermodynamic, Experimental and Simulation Approach. Advanced Engineering Materials, 2006, 8, 241-247.	3.5	43
28	Wafer-scale fabrication and growth dynamics of suspended graphene nanoribbon arrays. Nature Communications, 2016, 7, 11797.	12.8	43
29	Largeâ€“scale phaseâ€“field lattice Boltzmann study on the effects of natural convection on dendrite morphology formed during directional solidification of a binary alloy. Computational Materials Science, 2020, 171, 109209.	3.0	42
30	Advent of Crossâ€Scale Modeling: Highâ€Performance Computing of Solidification and Grain Growth. Advanced Theory and Simulations, 2018, 1, 1800065.	2.8	40
31	Diffusion-controlled peritectic reaction process in carbon steel analyzed by quantitative phase-field simulation. Acta Materialia, 2010, 58, 6134-6141.	7.9	39
32	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
33	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
34	Three-dimensional morphologies of inclined equiaxed dendrites growing under forced convection by phase-field-lattice Boltzmann method. Journal of Crystal Growth, 2018, 483, 147-155.	1.5	39
35	Two-dimensional large-scale phase-field lattice Boltzmann simulation of polycrystalline equiaxed solidification with motion of a massive number of dendrites. Computational Materials Science, 2020, 178, 109639.	3.0	39
36	Permeability prediction for flow normal to columnar solidification structures by largeâ€“scale simulations of phaseâ€“field and lattice Boltzmann methods. Acta Materialia, 2019, 164, 237-249.	7.9	37

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37	Grain growth kinetics in submicrometer-scale molecular dynamics simulation. Acta Materialia, 2018, 153, 108-116.	7.9	36
38	Thermodynamic modeling of the Caâ€“Sn system based on finite temperature quantities from first-principles and experiment. Acta Materialia, 2006, 54, 4939-4951.	7.9	34
39	Thermodynamic assessment of Mgâ€“Alâ€“Mn phase equilibria, focusing on Mg-rich alloys. International Journal of Materials Research, 2005, 96, 857-869.	0.8	33
40	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
41	Variational formulation of a quantitative phase-field model for nonisothermal solidification in a multicomponent alloy. Physical Review E, 2017, 96, 033311.	2.1	31
42	Datta-Das-type spin-field-effect transistor in the nonballistic regime. Physical Review B, 2008, 77, .	3.2	29
43	Million-atom molecular dynamics simulation on spontaneous evolution of anisotropy in solid nucleus during solidification of iron. Scripta Materialia, 2014, 86, 20-23.	5.2	29
44	Large-scale phase-field study of anisotropic grain growth: Effects of misorientation-dependent grain boundary energy and mobility. Computational Materials Science, 2021, 186, 109992.	3.0	29
45	Formation mechanism of coarse columnar Î³ grains in as-cast hyperperitectic carbon steels. Acta Materialia, 2011, 59, 3334-3342.	7.9	28
46	Formation conditions of coarse columnar austenite grain structure in peritectic carbon steels by the discontinuous grain growth mechanism. Acta Materialia, 2011, 59, 5700-5709.	7.9	27
47	Abnormal Grain Growth in Austenite Structure Reversely Transformed from Ferrite/Pearlite-Banded Structure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4623-4634.	2.2	27
48	Low temperature superplasticity of a dual-phase Mg-Li-Zn alloy processed by a multi-mode deformation process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 737, 61-68.	5.6	27
49	Permeability tensor for columnar dendritic structures: Phase-field and lattice Boltzmann study. Acta Materialia, 2020, 188, 282-287.	7.9	27
50	Superplastic behavior of Al-coated Mg alloy sheet. Journal of Alloys and Compounds, 2014, 601, 179-185.	5.5	25
51	GPU-accelerated 3D phase-field simulations of dendrite competitive growth during directional solidification of binary alloy. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012063.	0.6	25
52	Simulation method based on phase-field lattice Boltzmann model for long-distance sedimentation of single equiaxed dendrite. Computational Materials Science, 2019, 164, 39-45.	3.0	25
53	Quantitative Phase-field Modeling and Simulations of Solidification Microstructures. ISIJ International, 2020, 60, 2745-2754.	1.4	25
54	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

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55	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. Philosophical Magazine, 2003, 83, 315-328.	1.6	22
56	Bayesian inference of solid-liquid interfacial properties out of equilibrium. Physical Review E, 2020, 101, 052121.	2.1	22
57	Refinement of As-cast Austenite Microstructure in S45C Steel by Titanium Addition. ISIJ International, 2008, 48, 1373-1379.	1.4	21
58	Bridging molecular dynamics and phase-field methods for grain growth prediction. Computational Materials Science, 2018, 152, 118-124.	3.0	21
59	First-principles calculations of phase equilibria and transformation dynamics of Fe-based alloys. Journal of Phase Equilibria and Diffusion, 2006, 27, 47-53.	1.4	20
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	Phase field calculations with CVM free energy for a disorder-B2 transition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 312, 50-56.	5.6	19
62	Vanishing of inhomogeneous spin relaxation in InAs-based field-effect transistor structures. Physical Review B, 2007, 75, .	3.2	19
63	TiC Coating on Titanium by Carbonization Reaction Using Spark Plasma Sintering. Materials Transactions, 2013, 54, 2098-2101.	1.2	19
64	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. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 054004.	2.0	19
65	Accuracy Evaluation of Phase-field Models for Grain Growth Simulation with Anisotropic Grain Boundary Properties. ISIJ International, 2020, 60, 160-167.	1.4	19
66	A parametric study of morphology selection in equiaxed dendritic solidification. Computational Materials Science, 2019, 162, 76-81.	3.0	16
67	Importance of microstructural evolution on prediction accuracy of microsegregation in Al-Cu and Fe-Mn alloys. International Journal of Heat and Mass Transfer, 2019, 132, 1004-1017.	4.8	16
68	Disorder-L1₀ Transition Investigated by Phase Field Method with CVM Local Free Energy. Materials Transactions, 2001, 42, 2033-2041.	1.2	14
69	Existence or nonexistence of thermal pinning effect in grain growth under temperature gradient. Computational Materials Science, 2013, 69, 7-13.	3.0	14
70	Microstructural Features and Formation Processes of As-cast Austenite Grain Structures in Hypoperitectic Carbon Steels. ISIJ International, 2015, 55, 2374-2382.	1.4	14
71	A Molecular Dynamics Study of Partitionless Solidification and Melting of Alâ€“Cu Alloys. ISIJ International, 2017, 57, 1774-1779.	1.4	14
72	Large-scale phase-field simulation of three-dimensional isotropic grain growth in polycrystalline thin films. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 054003.	2.0	14

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73	Micrometer-scale molecular dynamics simulation of microstructure formation linked with multi-phase-field simulation in same space scale. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 054002.	2.0	14
74	Motion and Morphology of Triple Junction in Peritectic Reaction Analyzed by Quantitative Phase-field Model. ISIJ International, 2010, 50, 1879-1885.	1.4	13
75	Effects of Fine Precipitates on Austenite Grain Refinement of Micro-alloyed Steel during Cyclic Heat Treatment. ISIJ International, 2019, 59, 2098-2104.	1.4	13
76	Competitive growth during directional solidification of a binary alloy with natural convection: two-dimensional phase-field study. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 054001.	2.0	13
77	Fabrication of Al-Coated Mgâ€“Li Alloy Sheet and Investigation of Its Properties. Acta Metallurgica Sinica (English Letters), 2019, 32, 169-177.	2.9	13
78	Estimation of time-dependent heat transfer coefficient in unidirectional casting using a numerical model coupled with solidification analysis and data assimilation. International Journal of Heat and Mass Transfer, 2020, 150, 119222.	4.8	13
79	Novel estimation method for anisotropic grain boundary properties based on Bayesian data assimilation and phase-field simulation. Materials and Design, 2021, 210, 110089.	7.0	13
80	Aluminum Coating on Magnesium-Based Alloy by Hot Extrusion and Its Characteristics. Materials Transactions, 2012, 53, 1034-1041.	1.2	13
81	Development of Microstructure Simulation System in SIP-Materials Integration Projects. Materials Transactions, 2020, 61, 2047-2051.	1.2	13
82	Correlation between three-dimensional and cross-sectional characteristics of ideal grain growth: large-scale phase-field simulation study. Journal of Materials Science, 2018, 53, 15165-15180.	3.7	12
83	Phase-field simulation of abnormal grain growth during carburization in Nb-added steel. Computational Materials Science, 2020, 177, 109558.	3.0	12
84	Critical Estimation of Relaxation Coefficient in TDGL Equation Based on Path Probability Method. Materials Transactions, 2006, 47, 2718-2724.	1.2	11
85	Transition of solidification mode and the as-cast Î³ grain structure in hyperperitectic carbon steels. Acta Materialia, 2012, 60, 2927-2938.	7.9	11
86	Microstructure evolution during superplastic deformation of an Al-coated Mg alloy sheet. Journal of Alloys and Compounds, 2019, 805, 436-443.	5.5	11
87	Bayesian Data Assimilation of Temperature Dependence of Solidâ€“Liquid Interfacial Properties of Nickel. Nanomaterials, 2021, 11, 2308.	4.1	11
88	Phase-field study on an array of tilted columnar dendrites during the directional solidification of a binary alloy. Computational Materials Science, 2022, 203, 111143.	3.0	11
89	Refinement of As-cast Austenite Grain in Carbon Steel by Addition of Titanium. ISIJ International, 2009, 49, 1362-1366.	1.4	10
90	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

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91	Phase Evolution, Microstructure and Hardness of TiB2-based Co-containing Composite by SHS under Pseudo-isostatic Pressure. ISIJ International, 2012, 52, 1698-1704.	1.4	10
92	A critical condition for the formation of a coarse columnar Î³ grain structure in a peritectic solidified carbon steel. Acta Materialia, 2013, 61, 7334-7341.	7.9	10
93	Sensitivity analysis for thickness uniformity of Al coating layer in extrusion of Mg/Al clad bar. International Journal of Advanced Manufacturing Technology, 2015, 80, 507-513.	3.0	10
94	Microstructure refinement and mechanical properties improvement of Al-Si-Fe alloys by hot extrusion using a specially designed high-strain die. Journal of Materials Processing Technology, 2020, 277, 116447.	6.3	10
95	Parameter estimation for heat transfer analysis during casting processes based on ensemble Kalman filter. International Journal of Heat and Mass Transfer, 2020, 149, 119232.	4.8	10
96	Methodological Progress for Computer Simulation of Solidification and Casting. ISIJ International, 2010, 50, 1724-1734.	1.4	9
97	Effects of Second Phase Particle Dispersion on Kinetics of Isothermal Peritectic Transformation in Feâ€“C Alloy. ISIJ International, 2012, 52, 434-440.	1.4	9
98	Multi-Phase-Field Modeling of Transformation Kinetics at Multiple Scales and Its Application to Welding of Steel. Materials Transactions, 2019, 60, 170-179.	1.2	9
99	Overgrowth behavior at converging grain boundaries during competitive grain growth: A two-dimensional phase-field study. International Journal of Heat and Mass Transfer, 2020, 160, 120196.	4.8	9
100	Austenite Grain Growth in Peritectic Solidified Carbon Steels Analyzed by Phase-Field Simulation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2031-2042.	2.2	8
101	Macrosegregation simulation model based on Lattice-Boltzmann method with high computational efficiency. International Journal of Heat and Mass Transfer, 2018, 127, 561-570.	4.8	8
102	Uniquely selected primary dendrite arm spacing during competitive growth of columnar grains in Alâ€“Cu alloy. Journal of Crystal Growth, 2021, 558, 126014.	1.5	8
103	Theoretical Investigation of Coarsening Process of L1₀-Ordered Domain Based on Phase Field Method and Cluster Variation Method. Materials Transactions, 2002, 43, 2189-2192.	1.2	7
104	Suppression of Coarse Columnar Grain Formation in As-cast Austenite Structure of a Hyperperitectic Carbon Steel by Nb Addition. ISIJ International, 2011, 51, 1831-1837.	1.4	7
105	TiAl₃ Formation in the Titanium-Aluminum Diffusion Couple. Defect and Diffusion Forum, 0, 322, 185-194.	0.4	7
106	Effects of Ti Addition on Austenite Grain Growth during Reheating of As-Cast 0.2 mass% Carbon Steel. ISIJ International, 2012, 52, 1832-1840.	1.4	7
107	Effects of Concentrations of Micro-alloying Elements and Hot-forging Temperature on Austenite Grain Structure Formed during Carburization of Case-hardening Steel. ISIJ International, 2020, 60, 2549-2557.	1.4	7
108	Towards the First-Principles Investigation of Ordering Dynamics. Materials Science Forum, 2005, 475-479, 3075-3080.	0.3	6

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109	Iteration calculation for path probability method with spin kinetics. Physical Review B, 2005, 72, .	3.2	6
110	Thermodynamic modeling of the system Asâ€“Fe combined with first-principles total energy calculations. Journal of Crystal Growth, 2008, 310, 2751-2759.	1.5	6
111	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
112	Quantification of local plastic strain distribution beneath surface of deformed iron. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 564, 169-175.	5.6	6
113	Microsegregation in multicomponent alloy analysed by quantitative phase-field model. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012075.	0.6	6
114	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
115	Phase-Field Simulations and Analysis of Effect of Dispersed Particles on Migration of Delta to Gamma Transformation Interface. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 981-988.	2.2	6
116	Fabrication of Carbon Fiber Oriented Alâ€“Based Composites by Hot Extrusion and Evaluation of Their Thermal Conductivity. Materials Transactions, 2017, 58, 938-944.	1.2	6
117	Configurational kinetics studied by Path Probability Method. Progress in Materials Science, 2021, 120, 100765.	32.8	6
118	Effects of Addition of Titanium and Boron on Columnar Austenite Grain in Carbon Steel. ISIJ International, 2009, 49, 1367-1371.	1.4	5
119	Numerical Analysis on Columnar-to-equiaxed Transition of Î´-Ferrite Dendrite in Carbon Steel Induced by Titanium Carbonitride Particles. ISIJ International, 2009, 49, 1568-1574.	1.4	5
120	As-cast Austenite Grain Structure in Al Added 0.2 wt% Carbon Steel. ISIJ International, 2010, 50, 231-238.	1.4	5
121	Combustion synthesis of TiB₂based hard material cemented by Feâ€“Al intermetallics. Powder Metallurgy, 2012, 55, 162-167.	1.7	5
122	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
123	Prediction of Microsegregation 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
124	Effects of Second Phase Particles on Migration of ^|^alpha;/^|^gamma; Interface during Isothermal ^|^alpha; to ^|^gamma; Transformation. ISIJ International, 2012, 52, 1841-1847.	1.4	4
125	Physical and numerical modelling of backward extrusion of Mg alloy with Al coating. CIRP Annals - Manufacturing Technology, 2015, 64, 253-256.	3.6	4
126	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

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127	Effect of Cold-Deformation on Austenite Grain Growth Behavior in Solution-Treated Low Alloy Steel. Metals, 2018, 8, 1004.	2.3	4
128	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. ISIJ International, 2021, 61, 1964-1970.	1.4	4
129	Experimental Investigation and Thermodynamic Calculation of Binary Mg-Mn Phase Equilibria. Journal of Phase Equilibria and Diffusion, 2005, 26, 234-239.	1.4	4
130	Effects of Ti Addition on As-cast Î³ 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
131	Thermodynamic Calculation of Phase Equilibria in As-Fe-In Ternary System Based on CALPHAD Approach. Materials Transactions, 2009, 50, 1202-1207.	1.2	3
132	Changes in microstructure and mechanical properties of cast Alâ€“Si alloy due to hot rolling. Keikinzoku/Journal of Japan Institute of Light Metals, 2010, 60, 7-11.	0.4	3
133	Aluminum Coating on Magnesium-Based Alloy by Hot Extrusion and Its Characteristics. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2011, 75, 633-639.	0.4	3
134	Increase of Austenite Grain Coarsening Temperature in Banded Ferrite/Pearlite Steel by Cold Deformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 32-36.	2.2	3
135	Prediction of Microsegregation Based on Machine Learning and Its Extension to a Macrosegregation Simulation. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 720-729.	0.4	3
136	Coating on Magnesium Alloy with Super Duralumin by Hot Extrusion and Evaluation of Its Surface Properties. Materials Transactions, 2018, 59, 432-436.	1.2	3
137	Fabrication of Unidirectionally Orientated Carbon Fiber Reinforced Cu-Based Composites by Hot Extrusion and Evaluation of Their Thermal Properties. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2018, 82, 125-129.	0.4	3
138	Austenite memory during reverse transformation of steels at different heating rates. Materialia, 2019, 7, 100409.	2.7	3
139	Development of High Corrosion- and Wear-Resistant Al-Si Alloy Coating on AZ80 Mg Alloy by Hot Extrusion. Journal of Materials Engineering and Performance, 2020, 29, 6355-6362.	2.5	3
140	In-situ observation of abnormal grain growth in a low-alloyed carbon steel using SEM-EBSD. Materialia, 2021, 15, 100985.	2.7	3
141	Acceleration of Macrosegregation Simulation Based on Lattice Boltzmann Method. ISIJ International, 2018, 58, 114-122.	1.4	3
142	Time invariance of three-dimensional morphology of equiaxed dendrite: A phase-field study. Computational Materials Science, 2022, 204, 111173.	3.0	3
143	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
144	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

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145	Combustion Synthesis of TiC-TiB₂-Based Cermets from Elemental Powders. Advances in Tribology, 2011, 2011, 1-8.	2.1	2
146	Theoretical and numerical investigations on grain boundary migration due to inverse pinning. Computational Materials Science, 2013, 79, 558-563.	3.0	2
147	Misorientation/local plastic strain manifestations in chemical etching color. Micron, 2014, 59, 28-32.	2.2	2
148	Experimental Verification of a Critical Condition for the Formation of As-Cast Coarse Columnar Austenite Grain Structure in a Hyperperitectic Carbon Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 5240-5247.	2.2	2
149	Grain Refinement and Ductility Improvement by Hot Extrusion Using a Heteromorphic Die with Small Holes. Materials Transactions, 2016, 57, 927-934.	1.2	2
150	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
151	Development of Microstructure Simulation System in SIP-Materials Integration Projects. Materia Japan, 2019, 58, 494-497.	0.1	2
152	Transient Behavior of a Stress-Strain Curve within Cottrell-Stokes Law. Materials Transactions, JIM, 1999, 40, 875-878.	0.9	1
153	From Phase Equilibria to Transformation Dynamics. Defect and Diffusion Forum, 2007, 263, 21-30.	0.4	1
154	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
155	Combustion Synthesis of Titanium-Based Cemented Carbides. Materials Science Forum, 2010, 638-642, 1860-1865.	0.3	1
156	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. Computational Materials Science, 2015, 106, 188-192.	3.0	1
157	The Relationship between the Spark Plasma Sintering Temperature and Mechanical Properties of Combustion-Synthesized Î±- and Î²-SiAlON. Materials Transactions, 2016, 57, 1593-1596.	1.2	1
158	Annealing Behavior of Surface-Locally Cold-Deformed Low-Carbon Steel with a Large Strain Gradient. Metals, 2018, 8, 976.	2.3	1
159	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
160	Application of Heat Transfer Coefficient Estimation Using Data Assimilation and a 1-D Solidification Model to 3-D Solidification Simulation. ISIJ International, 2022, 62, 1666-1673.	1.4	1
161	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
162	Multi-Scale Phase Field Simulation of Disorder-Order Transition, Combined with Cluster Variation and Path Probability Methods. Materials Science Forum, 0, 631-632, 401-406.	0.3	0

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163	Phase-field Simulation of Microstructural Evolution Process in Alloy System. Materia Japan, 2009, 48, 375-378.	0.1	0
164	Effects of Strain-Graded Plastic Deformation on Mechanical Properties of Metals. Advances in Science and Technology, 0, , .	0.2	0
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