Hideyuki Yasuda

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8303577/publications.pdf

Version: 2024-02-01

216 papers	3,872 citations	117571 34 h-index	175177 52 g-index
218 all docs	218 docs citations	218 times ranked	1721 citing authors

#	Article	IF	Citations
1	Investigation on the Solidification and Phase Transformation in Pb-Free Solders Using In Situ Synchrotron Radiography and Diffraction: A Review. Acta Metallurgica Sinica (English Letters), 2022, 35, 49-66.	1.5	2
2	The effect of Ni on the growth morphology of primary Î²-phase in an In-35Âwt%Sn alloy. Journal of Alloys and Compounds, 2022, 897, 163172.	2.8	7
3	Controlling the distribution of porosity during transient liquid phase bonding of Sn-based solder joint. Materials Today Communications, 2022, 31, 103248.	0.9	1
4	Properties of Sn-3Âwt%Ag-5Âwt%Cu alloys with Cu6Sn5 intermetallics grain refined by Mg. Materials Today Communications, 2022, 31, 103221.	0.9	6
5	Liquid/Solid Interaction of Sn-58Bi/Sn-3.0Ag-0.5Cu Dissimilar Joints during Soldering at Low Temperature by In-Situ Synchrotron Imaging. Jom, 2022, 74, 2760-2769.	0.9	2
6	Effect of Kaolin Geopolymer Ceramics Addition on the Microstructure and Shear Strength of Sn-3.0Ag-0.5Cu Solder Joints during Multiple Reflow. Materials, 2022, 15, 2758.	1.3	3
7	Two-dimensional phase-field study for spangle texture formation in hot-dip galvanizing. Computational Materials Science, 2021, 187, 110077.	1.4	4
8	Origin of Primary Cu6Sn5 in Hypoeutectic Solder Alloys and a Method of Suppression to Improve Mechanical Properties. Journal of Electronic Materials, 2021, 50, 710-722.	1.0	9
9	Effect of Ni, Zn, Au, Sb and In on the Suppression of the Cu3Sn Phase in Sn-10Âwt.%Cu Alloys. Journal of Electronic Materials, 2021, 50, 881-892.	1.0	4
10	Selection of the Massive-like Î´-Î³ Transformation due to Nucleation of Metastable Î´ Phase in Fe-18 mass%Cr-Ni Alloys with Ni Contents of 8, 11, 14 and 20 mass%. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2021, 107, .	0.1	0
11	Evaluation of wave-like nucleation events in Al-4%Si alloys with addition of TiB₂ particles by time-resolved and in-situ observation. Keikinzoku/Journal of Japan Institute of Light Metals, 2021, 71, 22-29.	0.1	0
12	Effects of Surface Finish on Sn-3.0Ag-0.5Cu Solder Joint Microstructure and Strength. Journal of Electronic Materials, 2021, 50, 855-868.	1.0	7
13	Microstructure Evolution of Ag/TiO2 Thin Film. Magnetochemistry, 2021, 7, 14.	1.0	2
14	Formation of Extra Vacancies in Nucleating Î³ Phase during Î´-Î³ Massive-like Phase Transformation in Carbon Steel. Journal of Smart Processing, 2021, 10, 202-207.	0.0	0
15	Erratum to â€œSelection of the Massive-like Î´-Î³ Transformation due to Nucleation of Metastable Î´ Phase in Fe-18 Mass%Cr-Ni Alloys with Ni Contents of 8, 11, 14 and 20 Mass%â€•[ISIJ International, Vol. 59 (2019), No. 3, pp. 459-465]. ISIJ International, 2021, 61, 1053-1053.	0.6	2
16	In-situ observation of high-temperature Pb-free electric interconnections by synchrotron microradiography. Materials Letters, 2021, 291, 129520.	1.3	3
17	Time-resolved and <i>in-situ</i> Observation of Semisolid Deformation in Alâ€“Cu Alloys with Equiaxed and Columnar Grain Structures by Using a Combination Technique of 4D-CT and 3DXRD. ISIJ International, 2021, 61, 1567-1578.	0.6	8
18	Microstructure, thermal behavior and joint strength of Sn-0.7Cu-1.5Bi/electroless nickel immersion gold (ENIG). Journal of Materials Research and Technology, 2021, 12, 1700-1714.	2.6	8

#	Article	IF	Citations
19	Time-resolved and <i>In-situ</i> Observation of Solidification in TiAl Alloys. ISIJ International, 2021, 61, 1872-1878.	0.6	1
20	A Modified Random Sampling Method Using Unidirectionally Solidified Specimen: Solute Partition Coefficients in Feâ€“Crâ€“Niâ€“Moâ€“Cu Alloys. ISIJ International, 2021, 61, 1879-1888.	0.6	1
21	Rapid fabrication of tin-copper anodes for lithium-ion battery applications. Journal of Alloys and Compounds, 2021, 867, 159031.	2.8	9
22	Peritectic phase formation kinetics of directionally solidifying Sn-Cu alloys within a broad growth rate regime. Acta Materialia, 2021, 220, 117295.	3.8	13
23	The effect of Bi on the microstructure, electrical, wettability and mechanical properties of Sn-0.7Cu-0.05Ni alloys for high strength soldering. Materials and Design, 2020, 186, 108281.	3.3	35
24	Characterization of Growing Dendrites in CrMnFeCoNi High-Entropy Alloy by Time-Resolved and <i>In-Situ</i> Tomography. Materials Transactions, 2020, 61, 596-604.	0.4	22
25	Microstructure and growth kinetic study in Snâ€“Cu transient liquid phase sintering solder paste. Journal of Materials Science: Materials in Electronics, 2020, 31, 11077-11094.	1.1	7
26	In situ observation of austenite coarsening induced by massive-like transformation during solidification in Feâ€“C alloys. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012051.	0.3	5
27	Observation of semisolid deformation by using 4D-CT and 3DXRD. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012065.	0.3	6
28	Rheological transitions in semi-solid alloys: In-situ imaging and LBM-DEM simulations. Acta Materialia, 2020, 191, 24-42.	3.8	17
29	Time Evolution of Solidification Structure in Ductile Cast Iron with Hypereutectic Compositions. International Journal of Metalcasting, 2020, 14, 794-801.	1.5	5
30	Time-resolved and In-situ Observation of Î´â€“Î³ Transformation during Unidirectional Solidification in Feâ€“C Alloys. ISIJ International, 2020, 60, 930-938.	0.6	5
31	Effect of Elemental Combination on Microstructure and Mechanical Properties of Quaternary Refractory Medium Entropy Alloys. Materials Transactions, 2020, 61, 577-586.	0.4	12
32	<i>In-situ</i> Measurements of Solute Partition Coefficients between Solid and Liquid Phases in Feâ€“Crâ€“Niâ€“Moâ€“Cu Alloys during Solidification. ISIJ International, 2020, 60, 276-285.	0.6	13
33	Quantitative analysis of solidification of equiaxed grains in Al-Cu alloy refined by inoculant TiB₂ particles with using time-resolved X-ray tomography. Keikinzoku/Journal of Japan Institute of Light Metals, 2020, 70, 339-346.	0.1	8
34	Transformation from Ferrite to Austenite during/after Solidification in Peritectic Steel Systems: an X-ray Imaging Study. ISIJ International, 2020, 60, 2755-2764.	0.6	12
35	Characterization of dendritic growth in Feâ€“C system using time-resolved X-ray tomography and physics-based filtering. IOP Conference Series: Materials Science and Engineering, 2019, 529, 012023.	0.3	9
36	Dendrite fragmentation induced by massive-like Î´â€“Î³ transformation in Feâ€“C alloys. Nature Communications, 2019, 10, 3183.	5.8	65

#	Article	IF	Citations
37	<i>In Situ</i> Observations of Nucleation and Growth Behavior on Fe₂Al₅ Intermetallic Compound Formed in Molten Zinc Bath. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2019, 105, 709-715.	0.1	2
38	Al8Mn5 Particle Settling and Interactions with Oxide Films in Liquid AZ91 Magnesium Alloys. Jom, 2019, 71, 2235-2244.	0.9	20
39	In situ studies revealing dendrite and eutectic growth during the solidification of Sn-0.7Cu-0.5Ag Pb-free solder alloy. Journal of Alloys and Compounds, 2019, 797, 804-810.	2.8	16
40	Time-resolved and In-situ Observation of Î´-Î³ Transformation during Unidirectional Solidification in Fe-C Alloys. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2019, 105, 290-298.	0.1	14
41	Investigation using 4D-CT of massive-like transformation from the Î´ to Î³ phase during and after Î´-solidification in carbon steels. IOP Conference Series: Materials Science and Engineering, 2019, 529, 012013.	0.3	11
42	Selection of the Massive-like <i>Î´</i>-<i>Î³</i> Transformation due to Nucleation of Metastable <i>Î´</i> Phase in Fe-18 Mass%Cr-Ni Alloys with Ni Contents of 8, 11, 14 and 20 Mass%. ISIJ International, 2019, 59, 459-465.	0.6	13
43	Semi-solid deformation of Al-Cu alloys: A quantitative comparison between real-time imaging and coupled LBM-DEM simulations. Acta Materialia, 2019, 163, 208-225.	3.8	23
44	Competition between stable and metastable eutectic growth in Sn-Ni alloys. Acta Materialia, 2018, 149, 119-131.	3.8	17
45	High-Density Î²-FeSi2 crystals with 3D alignment fabricated by an oscillating magnetic field. IOP Conference Series: Materials Science and Engineering, 2018, 424, 012074.	0.3	0
46	Influence of Ni on the refinement and twinning of primary Cu6Sn5 in Sn-0.7Cu-0.05Ni. Intermetallics, 2018, 102, 34-45.	1.8	27
47	In-Situ Characterization of Dendrite Tip Radius in Sn-Base Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2018, 82, 78-83.	0.2	1
48	Suppression of Cu3Sn in the Sn-10Cu peritectic alloy by the addition of Ni. Journal of Alloys and Compounds, 2018, 766, 1003-1013.	2.8	19
49	X-Ray Imaging of Formation and Growth of Spheroidal Graphite in Ductile Cast Iron. Materials Science Forum, 2018, 925, 104-109.	0.3	5
50	Synchrotron Radiography of Sn-0.7Cu-0.05Ni Solder Solidification. Solid State Phenomena, 2018, 273, 66-71.	0.3	2
51	In situ imaging of microstructure formation in electronic interconnections. Scientific Reports, 2017, 7, 40010.	1.6	43
52	Cu6Sn5 crystal growth mechanisms during solidification of electronic interconnections. Acta Materialia, 2017, 126, 540-551.	3.8	81
53	Real time X-ray imaging of soldering processes at the SPring-8 synchrotron. , 2017, , .		0
54	Dilatancy in semi-solid steels at high solid fraction. Acta Materialia, 2017, 125, 187-195.	3.8	40

#	Article	IF	Citations
55	<i>In-situ</i> Measurement of Solute Partition Coefficient in Fe-Cr-Ni-Mo Alloys by Using X-ray Imaging and X-ray Florescence Analysis. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 678-687.	0.1	6
56	<i>In Situ</i> Observations of Tensile and Compressive Deformations in Semi Solid Metallic Alloys Using Time-resolved X-ray Imaging. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 668-677.	0.1	5
57	Elucidation of Mechanism of Emergence of Magnetic Anisotropy in FePd by Phase-Field Modeling. Journal of the Japan Society for Precision Engineering, 2017, 83, 415-419.	0.0	0
58	Real-Time Observation of AZ91 Solidification by Synchrotron Radiography. Minerals, Metals and Materials Series, 2017, , 597-603.	0.3	2
59	Elucidation of Î´-Î³ Massive like Transformation focusing on hetero-phase interface and competition between nucleation itself and consequent growth. The Proceedings of the Computational Mechanics Conference, 2017, 2017.30, 217.	0.0	0
60	Suppression of Cu 6 Sn 5 in TiO 2 reinforced solder joints after multiple reflow cycles. Materials and Design, 2016, 108, 418-428.	3.3	57
61	The influence of ageing on the stabilisation of interfacial (Cu,Ni)6(Sn,Zn)5 and (Cu,Au,Ni)6Sn5 intermetallics in Pb-free Ball Grid Array (BGA) solder joints. Journal of Alloys and Compounds, 2016, 685, 471-482.	2.8	37
62	Effect of Ni on the Formation and Growth of Primary Cu6Sn5 Intermetallics in Sn-0.7Âwt.%Cu Solder Pastes on Cu Substrates During the Soldering Process. Journal of Electronic Materials, 2016, 45, 154-163.	1.0	51
63	<i>In situ</i> Observation of Dendrite Growth in Sn-Bi Alloys under Ultrasonic Vibration Using Time-resolved X-ray Imaging. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2016, 102, 170-178.	0.1	3
64	Possible Contribution of Successive Nucleations to Îï¼Î³ Massive-like Transformation. The Proceedings of the Computational Mechanics Conference, 2016, 2016.29, 4_256.	0.0	0
65	Large-Field X-ray Imaging at SPring-8 BL20B2. Synchrotron Radiation News, 2015, 28, 30-35.	0.2	4
66	Numerically-quantified two dimensionality of microstructure evolution accompanying variant selection of FePd. Materials Research Express, 2015, 2, 076502.	0.8	1
67	Impacts of Interface Energies and Transformation Strain from BCC to FCC on Massive-like Î´-Î³ Transformation in Steel. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012049.	0.3	10
68	Interface Energies of Hetero- and Homo-Phase Boundaries and Their Impact on δ-γ Massive-Like Phase Transformations in Carbon Steel. Materials Transactions, 2015, 56, 1461-1466.	0.4	18
69	Atomistic Analyses of Competition between Site-Selective Segregation and Association of Point Defects at Grain Boundary in Y₂O₃-Doped ZrO₂. Materials Transactions, 2015, 56, 1344-1349.	0.4	7
70	Concurrent γ-Phase Nucleation as a Possible Mechanism of δ-γ Massive-like Phase Transformation in Carbon Steel: Numerical Analysis Based on Effective Interface Energy. Materials Transactions, 2015, 56, 1467-1474.	0.4	17
71	Yet Another Marked Difference among Impurities as Modifier Elements for Refinement of Eutectic Si in Al-Si Alloys. Materials Transactions, 2015, 56, 1475-1483.	0.4	5
72	Application of a macroscopic model to predict the band segregation induced by shear deformation of semisolid. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012011.	0.3	0

#	Article	IF	Citations
73	Real-time synchrotron x-ray observations of equiaxed solidification of aluminium alloys and implications for modelling. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012014.	0.3	16
74	Impact of melt convection induced by ultrasonic wave on dendrite growth in Snâ€“Bi alloys. Materials Letters, 2015, 150, 135-138.	1.3	30
75	In Situ Soldering Process Technique by Synchrotron X-Ray Imaging. Applied Mechanics and Materials, 2015, 754-755, 508-512.	0.2	3
76	Influence of Mg on Solidification of Hypereutectic Cast Iron: X-ray Radiography Study. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4937-4946.	1.1	28
77	Localization of shear strain and shear band formation induced by deformation in semi-solid Al-Cu alloys. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012078.	0.3	1
78	Development of a microwave sintered TiO2 reinforced Snâ€“0.7wt%Cuâ€“0.05wt%Ni alloy. Materials and Design, 2015, 82, 136-147.	3.3	43
79	On modeling of grain boundary segregation in aliovalent cation doped ZrO2: Critical factors in site-selective point defect occupancy. Scripta Materialia, 2015, 102, 91-94.	2.6	9
80	A real-time synchrotron X-ray study of primary phase nucleation and formation in hypoeutectic Alâ€“Si alloys. Journal of Crystal Growth, 2015, 430, 122-137.	0.7	45
81	Kinetics of the Î´/Î³ interface in the massive-like transformation in Fe-0.3C-0.6Mn-0.3Si alloys. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012062.	0.3	19
82	MCWASP XIV: International Conference on Modelling of Casting, Welding and Advanced Solidification Processes. IOP Conference Series: Materials Science and Engineering, 2015, 84, 011001.	0.3	2
83	Rapid Cu6Sn5 growth at liquid Sn/solid Cu interfaces. Scripta Materialia, 2015, 100, 17-20.	2.6	56
84	The influence of Ni and Zn additions on microstructure and phase transformations in Snâ€“0.7Cu/Cu solder joints. Acta Materialia, 2015, 83, 357-371.	3.8	119
85	Impact of interplay between magnetic field, transformation strain, and coarsening on variant selection inL10-type FePd. Journal of Applied Physics, 2014, 115, 073501.	1.1	6
86	In Situ Observation of Deformation in Semi-solid Fe-C Alloys at High Shear Rate. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5613-5623.	1.1	17
87	Solidification of Sn-0.7Cu-0.15Zn Solder: In Situ Observation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 918-926.	1.1	23
88	Impact of Dynamic Interlayer Interactions on Thermal Conductivity of Ca3Co4O9. Journal of Electronic Materials, 2014, 43, 1905-1915.	1.0	8
89	Nonrandom Point Defect Configurations and Driving Force Transitions for Grain Boundary Segregation in Trivalent Cation Doped ZrO₂. Langmuir, 2014, 30, 14179-14188.	1.6	20
90	Eutectic Morphology of Al-7Si-0.3Mg Alloys with Scandium Additions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4549-4560.	1.1	34

#	Article	IF	Citations
91	Synchrotron Radiography Studies of Shear-Induced Dilation in Semisolid Al Alloys and Steels. Jom, 2014, 66, 1415-1424.	0.9	13
92	Particle size distribution and composition in phase-separated Cu75Co25 alloys under various magnetic fields. Scripta Materialia, 2014, 82, 5-8.	2.6	30
93	Ni segregation in the interfacial (Cu,Ni)6Sn5 intermetallic layer of Sn-0.7Cu-0.05Ni/Cu ball grid array (BGA) joints. Intermetallics, 2014, 54, 20-27.	1.8	24
94	In Situ Observation of Solidification Behaviors in Carbon Steels Using Synchrotron X-ray Imaging. Materia Japan, 2014, 53, 467-470.	0.1	0
95	Development in In Situ Observation of Deformation in Semi-solid Alloys Using X-Ray Imaging. , 2014, , 231-243.		2
96	Real time synchrotron X-ray observations of solidification in hypoeutectic Alâ€“Si alloys. Materials Characterization, 2013, 85, 134-140.	1.9	34
97	Advanced Analysis of Solidification by X-ray Imaging. , 2013, , 93-104.		0
98	Phase selection and microstructure formation in undercooled Coâ€“61.8at.% Si melts under various containerless processing conditions. Acta Materialia, 2013, 61, 4861-4873.	3.8	24
99	In situ study of granular micromechanics in semi-solid carbon steels. Acta Materialia, 2013, 61, 4169-4179.	3.8	34
100	Characterization of Shear Deformation Based on In-situ Observation of Deformation in Semi-solid Alâ€“Cu Alloys and Water-particle Mixture. ISIJ International, 2013, 53, 1195-1201.	0.6	21
101	Effect of Spatial Distribution of Local Magnetization on Microstructure Formation in <i>L</i>1₀-type Ferromagnetic Alloys under External Magnetic Field. Transactions of the Materials Research Society of Japan, 2013, 38, 673-676.	0.2	3
102	Characterization of Shear Deformation Based on In-situ Observation of Deformation in Semi-Solid Al-Cu Alloys and Water-Particle Mixture. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2013, 99, 141-148.	0.1	2
103	Real Time Synchrotron X-Ray Imaging for Nucleation and Growth of Cu₆Sn₅ in Sn-7Cu-0.05Ni High Temperature Lead-Free Solder Alloys. Advanced Materials Research, 2012, 626, 200-204.	0.3	6
104	In-situobservation of peritectic solidification in Sn-Cd and Fe-C alloys. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012084.	0.3	25
105	Real-Time Radiographic Observation of Solidification Behavior of Al–Si–Cu Casting Alloys with the Variation of Iron Content. Materials Transactions, 2012, 53, 374-379.	0.4	20
106	Macroscopic modelling of semisolid deformation for considering segregation bands induced by shear deformation. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012053.	0.3	5
107	Direct Observation of Shear Deformation in Semi-solid Alloys Using X-ray Imaging. Materia Japan, 2012, 51, 561-568.	0.1	1
108	Fabrication of Al₂O₃–YAG Equilibrium Eutectic Composites via Transformation from Fine Al₂O₃ and YAP Powder Mixtures. Materials Transactions, 2012, 53, 1124-1129.	0.4	4

#	Article	IF	Citations
109	Massive transformation fromÎ´phase toÎ³phase in Feâ€“C alloys and strain induced in solidifying shell. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012036.	0.3	38
110	Growth orientations and mechanical properties of Cu6Sn5 and (Cu,Ni)6Sn5 on poly-crystalline Cu. Journal of Alloys and Compounds, 2012, 536, 38-46.	2.8	56
111	Synchrotron radiography of direct-shear in semi-solid alloys. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012086.	0.3	9
112	Solidification of Al2O3â€“YAG eutectic composites with off-metastable eutectic composition from undercooled melt produced by melting Al2O3â€“YAP eutectics. Journal of the European Ceramic Society, 2012, 32, 2137-2143.	2.8	7
113	Development of X-ray Imaging for Observing Solidification of Carbon Steels. ISIJ International, 2011, 51, 402-408.	0.6	100
114	æ”¾å°„å…‰ã,'åˆ©ç”¨ã•ãŸã,¢ãƒ«ãƒŸãƒ‹ã‚¦ãƒ å•é‡'ã®å‡ºå›ºç¾©è±¡ã®è§£æ˜Ž. Keikinzoku/Journal of Japan Institute of Light Metals, 201		
115	Direct observation of deformation in semi-solid carbon steel. Scripta Materialia, 2011, 64, 1129-1132.	2.6	81
116	Granular deformation mechanisms in semi-solid alloys. Acta Materialia, 2011, 59, 4933-4943.	3.8	89
117	In situ investigation of unidirectional solidification in Snâ€“0.7Cu and Snâ€“0.7Cuâ€“0.06Ni. Acta Materialia, 2011, 59, 4043-4054.	3.8	56
118	Glassy solidification criterion of Zr₅₀Cu₄₀Al₁₀alloy. Journal of Physics: Conference Series, 2010, 144, 012121.	0.3	0
119	Numerical Analyses of Effectiveness of Magnetic Field on Variant Selection in FePd by Phase Field Modeling. ISIJ International, 2010, 50, 1908-1913.	0.6	5
120	Selective dissolution of nanolamellar Tiâ€“41 at.% Al alloy single crystals. Acta Materialia, 2010, 58, 2876-2886.	3.8	25
121	Effect of Ionic Radius and Resultant Two-Dimensionality of Phonons on Thermal Conductivity in M x CoO2 (MÂ=ÂLi, Na, K) by Perturbed Molecular Dynamics. Journal of Electronic Materials, 2010, 39, 1439-1445.	1.0	11
122	Synchrotron Micro-XRF Measurements of Trace Element Distributions in BGA Type Solders and Solder Joints. Transactions of the Japan Institute of Electronics Packaging, 2010, 3, 40-46.	0.3	14
123	Derivation of Interatomic Potentials from Ab-initio Calculations for Molecular Dynamics Simulations of Na_XCoO₂. Transactions of the Materials Research Society of Japan, 2010, 35, 205-208.	0.2	7
124	Regular Structure Formation of Hypermonotectic Al-In Alloys. Materials Science Forum, 2010, 649, 131-136.	0.3	4
125	The role of trace element segregation in the eutectic modification of hypoeutectic Alâ€“Si alloys. Journal of Alloys and Compounds, 2010, 489, 415-420.	2.8	132
126	Does reduced fluid flow alter Î±-Fe content of Ndâ€“Feâ€“B ingots?. Journal of Alloys and Compounds, 2010, 493, L8-L11.	2.8	4

#	Article	IF	Citations
127	In-situ Observation of Sn alloy solidification at SPring-8. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2009, 78, 600-603.	0.0	2
128	Three-dimensional alignment of FeSi₂with orthorhombic symmetry by an anisotropic magnetic field. Journal of Physics: Conference Series, 2009, 165, 012021.	0.3	13
129	Chain structure in the unidirectionally solidified Al2O3â€"YAGâ€"ZrO2 eutectic composite. Journal of Crystal Growth, 2009, 311, 3765-3770.	0.7	13
130	In situobservation of solidification phenomena in Alâ€"Cu and Feâ€"Siâ€"Al alloys. International Journal of Cast Metals Research, 2009, 22, 15-21.	0.5	81
131	Formation and microstructure of Al₂O₃-YAG eutectic ceramics by phase transformation from metastable system to equilibrium system. Journal of Physics: Conference Series, 2009, 165, 012006.	0.3	5
132	Crystal growth in the bulk-metallic-glass Zr-based alloys by using the DC + AC levitation method. Journal of Physics: Conference Series, 2009, 144, 012056.	0.3	1
133	Glassy solidification criterion of Zr50Cu40Al10alloy. Journal of Physics: Conference Series, 2009, 144, 012044.	0.3	0
134	Undercooling and rapid solidification of Cu₈₄Co₁₆alloys under a static magnetic field. Journal of Physics: Conference Series, 2009, 144, 012117.	0.3	11
135	Reduced droplet coarsening in electromagnetically levitated and phase-separated Cuâ€"Co alloys by imposition of a static magnetic field. Scripta Materialia, 2008, 59, 1002-1005.	2.6	35
136	In situobservation of nucleation, fragmentation and microstructure evolution in Snâ€"Bi and Alâ€"Cu alloys. International Journal of Cast Metals Research, 2008, 21, 125-128.	0.5	48
137	High-temperature characteristics of unidirectionally solidified ceramic eutectics. Acta Crystallographica Section A: Foundations and Advances, 2008, 64, C71-C71.	0.3	0
138	Effect of application of a high magnetic field on the microstructure of Fe substituted layered double hydroxide clay for a magnetic application. Journal of Applied Physics, 2007, 101, 09N516.	1.1	6
139	Glassy Solidification Criterion of Zr₅₀Cu₄₀Al₁₀ Alloy. Materials Transactions, 2007, 48, 1363-1372.	0.4	27
140	Effect of High Magnetic Field on Ferrite Materials Obtained by Calcination of Layered Double Hydroxide. Materials Transactions, 2007, 48, 2877-2882.	0.4	5
141	Effects of Shaping Conditions on the Microstructure and the Mechanical Property of the Al₂O₃-YAG Eutectic Composite Produced by Melting the Al₂O₃-YAP Eutectic Structure. Materials Transactions, 2007, 48, 2312-2315.	0.4	5
142	Effect of the Melt Flow on the Solidified Structure of Middle Carbon Steel by Means of the Levitation Method Using Alternating and Static Magnetic Fields. ISIJ International, 2007, 47, 612-618.	0.6	14
143	Recent Progress of EPM in Steelmaking, Casting, and Solidification Processing. ISIJ International, 2007, 47, 619-626.	0.6	31
144	Effects of magnetic field annealing on magnetic properties and microstructure of Ndâ€Feâ€Bâ€Tiâ€C based nanocomposite permanent magnet. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 4145-4148.	0.8	4

#	Article	IF	Citations
145	Applications of High Magnetic Fields in Materials Processing. Fluid Mechanics and Its Applications, 2007, , 329-344.	0.1	4
146	Three-dimensional Observation of Al₂O₃-GAP Eutectic Structure by X-ray Micro CT. Materia Japan, 2007, 46, 819-819.	0.1	1
147	Structure simulation in unidirectionally solidified turbine blade by dendrite envelope tracking model(I): numerical modeling. Transactions of Nonferrous Metals Society of China, 2006, 16, 235-241.	1.7	0
148	Structure defect prediction of single crystal turbine blade by dendrite envelope tracking model. Transactions of Nonferrous Metals Society of China, 2006, 16, s582-s585.	1.7	4
149	Structure simulation in unidirectionally solidified turbine blade by dendrite envelope tracking model (II): model validation and defects prediction. Transactions of Nonferrous Metals Society of China, 2006, 16, 753-759.	1.7	11
150	é™ç£å´ã,'é‡ç•³ã•–ãŸé›»ç£æµ®éŠãœç‰¹å¾´ã¨å¿œç”¨. Materia Japan, 2006, 45, 514-516.	0.1	0
151	Thermal Conductivity Measurements of Liquid Mercury and Gallium by a Transient Hot-Wire Method in a Static Magnetic Field. International Journal of Thermophysics, 2006, 27, 1760-1777.	1.0	18
152	Fabrication of aligned pores in aluminum by electrochemical dissolution of monotectic alloys solidified under a magnetic field. Scripta Materialia, 2006, 54, 527-532.	2.6	52
153	Determination of strontium segregation in modified hypoeutectic Alâ€"Si alloy by micro X-ray fluorescence analysis. Scripta Materialia, 2006, 55, 787-790.	2.6	98
154	Fabrication of Porous Aluminium and Copper Media by Using Monotectic Solidification under a Magnetic Field. Materials Science Forum, 2006, 512, 289-294.	0.3	0
155	Nondestructive Evaluation of Thermal Phase Growth in Solder Ball Micro-Joints by Synchrotron Radiation X-Ray Micro-Tomography. , 2005, , 1115.		4
156	Nucleation and Growth in Undercooled Melts of Bulk-Metallic-Glass Forming Zr₆₀Ni₂₅Al₁₅ Alloy. Materials Transactions, 2005, 46, 2762-2767.	0.4	14
157	Phenomenological Discussion of Fe and Co Film Electrodeposited in a Magnetic Field. ISIJ International, 2005, 45, 1001-1004.	0.6	9
158	Three-dimensional observation of the entangled eutectic structure in the Al2O3â€"YAG system. Journal of the European Ceramic Society, 2005, 25, 1397-1403.	2.8	22
159	Investigation of the Melt Flow on Solidified Structure by a Levitation Technique Using Alternative and Static Magnetic Fields. ISIJ International, 2005, 45, 991-996.	0.6	25
160	Undercooled Melt Shaping of Al₂O₃-YAG Eutectic Composite by Melting the Al₂O₃-YAP Eutectic Structure. Materials Science Forum, 2005, 475-479, 2709-2712.	0.3	5
161	Model Experiment of Particle Engulfment into the Solidifying Shell under Fluid Flow. ISIJ International, 2004, 44, 1366-1375.	0.6	8
162	Solidification and shape casting of Al2O3â€"YAG eutectic ceramics from the undercooled melt produced by melting Al2O3â€"YAP eutectics. Science and Technology of Advanced Materials, 2004, 5, 207-217.	2.8	18

#	Article	IF	Citations
163	Levitation of metallic melt by using the simultaneous imposition of the alternating and the static magnetic fields. Journal of Crystal Growth, 2004, 260, 475-485.	0.7	81
164	Direct observation of stray crystal formation in unidirectional solidification of Snâ€“Bi alloy by X-ray imaging. Journal of Crystal Growth, 2004, 262, 645-652.	0.7	194
165	Fabrication of porous aluminum with deep pores by using Alâ€“In monotectic solidification and electrochemical etching. Materials Letters, 2004, 58, 911-915.	1.3	31
166	DEVELOPMENT OF MAGNETO-VECTOR MATERIALS THROUGH VECTOR PROCESSING USING HIGH MAGNETIC FIELDS. Phosphorus Research Bulletin, 2004, 17, 45-50.	0.1	1
167	Undercooled Melt Formation and Shaping of Aluminaâ€“Yttrium Aluminum Garnet Eutectic Ceramics. Journal of the American Ceramic Society, 2003, 86, 1818-1820.	1.9	10
168	Effect of Magnetic Field on Solidification in Cu-Pb Monotectic Alloys. ISIJ International, 2003, 43, 942-949.	0.6	71
169	Prediction of porosity defect in spheroidal graphite iron castings. International Journal of Cast Metals Research, 2003, 16, 293-299.	0.5	9
170	Alignment of BiMn Crystal Orientation in Bi-20 at%Mn alloys by Laser Melting under a Magnetic Field. Materials Transactions, 2003, 44, 2550-2554.	0.4	45
171	Formation of Crystallographically Aligned Grains during Coarsening in a Magnetic Field. Materials Transactions, 2003, 44, 2555-2562.	0.4	12
172	Formation of Crystallographically Aligned BiMn Grains by Semi-solid Processing of Rapidly Solidified Bi-Mn Alloys under a Magnetic Field. Materials Transactions, 2003, 44, 2207-2212.	0.4	33
173	Shape Anisotropy Evolution of Co Grains in Cu-30at%Co Alloy by Annealing under Magnetic Field. ISIJ International, 2003, 43, 869-876.	0.6	2
174	Application of an Optical DTA for Morphological Transition in the Al2O3-YAP-ZrO2 Metastable Eutectic System. ISIJ International, 2003, 43, 1733-1741.	0.6	6
175	Micro-tomographic imaging for material sciences at BL47XU in SPring-8. European Physical Journal Special Topics, 2003, 104, 45-48.	0.2	8
176	Preface to the Special Issue on â€œAdvanced Application of Electromagnetic Force to Materials Processingâ€• ISIJ International, 2003, 43, 799-800.	0.6	2
177	Undercooled Melt Formation by Melting of Metastable Eutectic Structure in Al₂O₃-Y₂O₃-ZrO₂ System. Materials Transactions, 2002, 43, 2847-2854.	0.4	12
178	Coupled growth of unidirectionally solidified Al2O3â€“YAG eutectic ceramics. Journal of Crystal Growth, 2002, 244, 384-392.	0.7	63
179	Coupled Growth Zone of the Al₂O₃-YAG Eutectic System in the Undercooled Melt. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2002, 66, 9-15.	0.2	4
180	Selection of eutectic systems in Al2O3â€“Y2O3 ceramics. Science and Technology of Advanced Materials, 2001, 2, 67-71.	2.8	45

#	Article	IF	Citations
181	Production of Undercooled Melt by Heating the Metastable Al₂O₃-YAP Eutectic Structure. Materials Transactions, 2001, 42, 2124-2130.	0.4	8
182	Phase Selection of the Al_{<B>2</B>}O_{<B>3</B>}-Y_{<B>2</B>}O_{<B>3</B>} System Controlled by Nucleation. Materials Transactions, 2001, 42, 238-244.	0.4	18
183	Fabrication of Metallic Porous Media by Semisolid Processing Using Laser Irradiation. Materials Transactions, 2001, 42, 309-315.	0.4	10
184	Effect of Magnetic Field on Periodic Structure Formation in Pb–Bi and Sn–Cd Peritectic Alloys. Materials Transactions, JIM, 2000, 41, 1005-1012.	0.9	30
185	Periodic structure during unidirectional solidification for peritectic Cdâ€“Sn alloys. Journal of Crystal Growth, 2000, 210, 637-645.	0.7	42
186	Lift-off phenomenon in wave soldering. Acta Materialia, 2000, 48, 4475-4481.	3.8	19
187	Evaluation of a Thermoelectric Device Utilizing Porous Medium. Materials Research Society Symposia Proceedings, 2000, 626, 1121.	0.1	0
188	Fabrication of PbTe Porous Thermoelectric Materials by KCl-mixing. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1999, 63, 1468-1474.	0.2	5
189	Formation of banded structure in Pbâ€“Bi peritectic alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 262, 238-245.	2.6	37
190	A Model for Oscillatory Structure during Unidirectional Solidification of Peritectic Alloys. Materials Transactions, JIM, 1999, 40, 373-376.	0.9	9
191	Estimation of Generated Power of a Thermoelectric Device Utilizing Porous Medium. Materials Transactions, JIM, 1999, 40, 447-450.	0.9	6
192	Effect of Magnetic Field on Macrosegregation in (Bi, Sb)₂Te₃. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1997, 61, 1288-1295.	0.2	1
193	In-situ observation of peritectic growth with faceted interface. Journal of Crystal Growth, 1996, 158, 128-135.	0.7	36
194	Elastic constants of some intermetallic compounds as determined by the rectangular parallelepiped resonance method. Journal of Alloys and Compounds, 1994, 211-212, 585-588.	2.8	4
195	Elasticity of Ni-based L12-type intermetallic compounds. Acta Metallurgica Et Materialia, 1992, 40, 381-387.	1.9	94
196	Topologically and Chemically Homogeneous Amorphous Fe-Ti Alloys. Physica Status Solidi A, 1992, 129, 59-68.	1.7	1
197	Short-Range Structure of Amorphous Phase in the Immiscible Type Fe1â^'y (Cu1â^'x Agx)y Alloy System. Physica Status Solidi A, 1992, 132, 269-279.	1.7	4
198	Elastic Constants of Co₃Ti and CoTi Intermetallic Compounds. Materials Transactions, JIM, 1991, 32, 48-51.	0.9	16

#	Article	IF	Citations
199	Weak itinerant-electron ferromagnetism in amorphous Fe-Ti alloys. Journal of Physics Condensed Matter, 1990, 2, 3595-3610.	0.7	12
200	X-ray diffraction study of amorphous Fe-Ti alloys. Journal of Physics Condensed Matter, 1990, 2, 9967-9974.	0.7	7
201	EFFECT OF STRUCTURE DISORDER ON MAGNETISM OF ZrZn2 AND Ni3Al ALLOYS. Journal De Physique Colloque, 1988, 49, C8-103-C8-104.	0.2	0
202	MAGNETIC PROPERTIES OF AMORPHOUS Fe-Ti ALLOYS PRODUCED BY FACING TARGET TYPE SPUTTERING. Journal De Physique Colloque, 1988, 49, C8-1275-C8-1276.	0.2	0
203	Nonequilibrium Crystalline and Amorphous Zr–Zn Alloys Produced by Vapor Quenching. Transactions of the Japan Institute of Metals, 1987, 28, 692-698.	0.5	9
204	Synthesis of porous thermoelectric devices. , 0, , .		2
205	Morphological Variation of Fe/Cr-Rich Intermetallic Phase in Recycled Al-Si Alloy as a Function of Solidification Rate: Time-Resolved Radiography. Materials Science Forum, 0, 654-656, 974-977.	0.3	14
206	High Temperature Characteristics of Unidirectionally Solidified Eutectic Ceramic Composites and some Potential Applications. Materials Science Forum, 0, 638-642, 997-1002.	0.3	10
207	High Temperature Characteristics of Unidirectionally Solidified Al₂O₃/GAP Eutectic Composites with a Novel Microstructure. Materials Science Forum, 0, 706-709, 246-251.	0.3	6
208	<i>In Situ</i> Study of the Altering Globule Packing-Density during Semisolid Alloy Deformation. Solid State Phenomena, 0, 192-193, 185-190.	0.3	0
209	Effect of TiO₂ on the Formation of Primary and Interfacial Cu₆Sn₅ in Sn-0.7wt%Cu and Sn-0.7wt%Cu-0.05wt%Ni Solder Paste during Soldering. Key Engineering Materials, 0, 700, 161-169.	0.4	5
210	Solidification of Sn-3Ag-0.5Cu and Sn-0.7Cu-0.05Ni Solders. Materials Science Forum, 0, 857, 44-48.	0.3	1
211	Effect of Trace Elements on the Liquid Structure of Sn-Cu Alloys Investigated by High Energy X-Ray Diffraction. Solid State Phenomena, 0, 273, 101-106.	0.3	1
212	Fabrication of Porous Aluminium and Copper Media by Using Monotectic Solidification under a Magnetic Field. Materials Science Forum, 0, , 289-294.	0.3	1
213	Understanding the Rheological Transitions in Semi-Solid Alloys by a Combined <i>In Situ</i> Imaging and Granular Micromechanics Modeling Approach. Solid State Phenomena, 0, 327, 127-132.	0.3	0
214	Solidification structure control by magnetic fields. , 0, , .		0
215	New eutectic ceramics. , 0, , .		0
216	Effects of immersion silver (ImAg) and immersion tin (ImSn) surface finish on the microstructure and joint strength of Sn-3.0Ag-0.5Cu solder. Journal of Materials Science: Materials in Electronics, 0, , .	1.1	2