Masanori Kajihara

List of Publications by Year
in descending order

105	2,417	218381	253896
papers	citations	26 h-index	43 g-index

105	105	105	861
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Growth behavior of Fe2Al5 during reactive diffusion between Fe and Al at solid-state temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 459, 375-382.	2.6	149
2	Analysis of kinetics of reactive diffusion in a hypothetical binary system. Acta Materialia, 2004, 52, 1193-1200.	3.8	113
3	Growth behavior of compound layers in Sn/Cu/Sn diffusion couples during annealing at 433â€“473K. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 396, 115-123.	2.6	102
4	Growth behavior of Ni3Sn4 layer during reactive diffusion between Ni and Sn at solid-state temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 403, 269-275.	2.6	94
5	Kinetics of reactive diffusion between Au and Sn during annealing at solid-state temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 390, 118-126.	2.6	93
6	Growth behavior of compound layers during reactive diffusion between solid Cu and liquid Al. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 445-446, 355-363.	2.6	89
7	Quantitative Evaluation of Interdiffusion in Fe₂Al₅ during Reactive Diffusion in the Binary Fe–Al System. Materials Transactions, 2006, 47, 1480-1484.	0.4	76
8	Formation of intermetallic compound layers in Sn/Au/Sn diffusion couple during annealing at 433 K. Journal of Materials Science, 2004, 39, 2327-2334.	1.7	63
9	Kinetics of isothermal reactive diffusion between solid Fe and liquid Al. Journal of Materials Science, 2010, 45, 5676-5684.	1.7	58
10	Numerical Analysis for Kinetics of Reactive Diffusion Controlled by Boundary and Volume Diffusion in a Hypothetical Binary System. Materials Transactions, 2008, 49, 294-303.	0.4	55
11	Growth behavior of Nb3Sn layer during reactive diffusion between Cuâ€“8.3Sn alloy and Nb. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 404, 33-41.	2.6	52
12	Relationship between temperature dependence of interdiffusion and kinetics of reactive diffusion in a hypothetical binary system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 403, 234-240.	2.6	51
13	Reactive diffusion between Pd and Sn at solid-state temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 406, 134-141.	2.6	48
14	Reactive Diffusion between Ag and Sn at Solid State Temperatures. Materials Transactions, 2005, 46, 969-973.	0.4	44
15	Temperature Dependence of Kinetics for Reactive Diffusion in a Hypothetical Binary System. Materials Transactions, 2005, 46, 2142-2149.	0.4	43
16	Effect of Ni on reactive diffusion between Au and Sn at solid-state temperatures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 126, 37-43.	1.7	42
17	Kinetics of reactive diffusion between Cuâ€“8.1Snâ€“0.3Ti alloy and Nb. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 433, 83-89.	2.6	40
18	Morphology of Compounds Formed by Isothermal Reactive Diffusion between Solid Fe and Liquid Al. Materials Transactions, 2009, 50, 2212-2220.	0.4	40

#	Article	IF	Citations
19	Growth behavior of compounds due to solid-state reactive diffusion between Cu and Al. Journal of Materials Science, 2012, 47, 4955-4964.	1.7	39
20	Kinetic Features of Reactive Diffusion in Binary Systems. Defect and Diffusion Forum, 2006, 249, 91-96.	0.4	37
21	Growth Behavior of Au–Sn and Ag–Sn Compounds during Solid-state Reactive Diffusion between Au–Ag Alloys and Sn. Materials Transactions, 2005, 46, 1825-1832.	0.4	36
22	Formation of compounds and Kirkendall vacancy in the Cuâ€“Sn system. Microelectronic Engineering, 2014, 120, 133-137.	1.1	35
23	Fast Penetration of Sn into Ag by Diffusion Induced Recrystallization. Materials Transactions, 2006, 47, 822-828.	0.4	31
24	Numerical analysis for migration of austenite/ferrite interface during carburization of Fe. Journal of Materials Science, 2009, 44, 2109-2118.	1.7	28
25	Reactive diffusion between Agâ€“Au alloys and Sn at solid-state temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 427, 210-222.	2.6	27
26	Evaluation of Interdiffusion in Liquid Phase during Reactive Diffusion between Cu and Al. Materials Transactions, 2006, 47, 2480-2488.	0.4	26
27	Numerical analysis for migration of interface between liquid and solid phases during reactive diffusion in the binary Cuâ€“Al system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 459, 101-110.	2.6	26
28	Quantitative analysis for kinetics of reactive diffusion in the Feâ€“Cr system. Journal of Materials Science, 2007, 42, 2432-2442.	1.7	26
29	Growth rate of Nb3Sn for reactive diffusion between Nb and Cuâ€“9.3Snâ€“0.3Ti alloy. Journal of Materials Science, 2007, 42, 8178-8188.	1.7	26
30	Influence of Temperature Dependence of Solubility on Kinetics for Reactive Diffusion in a Hypothetical Binary System. Materials Transactions, 2008, 49, 715-722.	0.4	26
31	Kinetics of Solid-State Reactive Diffusion between Co and Sn. Materials Transactions, 2014, 55, 1058-1064.	0.4	26
32	Kinetics of reactive diffusion in the (Auâ€“Ni)/Sn system at solid-state temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 428, 276-283.	2.6	24
33	Chemical composition of regions alloyed by DIGM or DIR. Acta Metallurgica Et Materialia, 1991, 39, 2565-2574.	1.9	23
34	Driving Force for Grain Boundary Migration During Alloying by DIGM and DIR in Binary Systems. Scripta Materialia, 1998, 38, 1621-1627.	2.6	23
35	Experimental Study on Dissolution of .ALPHA. Phase in .GAMMA./.ALPHA./.GAMMA. Diffusion Couples of the Fe-Cr-Ni System.. ISIJ International, 1993, 33, 498-507.	0.6	20
36	Observations on diffusion-induced recrystallization in binary Ni/Cu diffusion couples annealed at an intermediate temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 312, 176-181.	2.6	20

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37	Growth Rate of Fine Grains Formed by Diffusion Induced Recrystallization in Ni Layer of Cu/Ni/Cu Diffusion Couples. Materials Transactions, JIM, 1998, 39, 218-224.	0.9	19
38	Kinetics of reactive diffusion between Pdâ€“Ag alloys and Sn at solid-state temperatures. Journal of Alloys and Compounds, 2009, 475, 608-613.	2.8	19
39	Kinetics of reactive diffusion between Ta and Cuâ€“9.3Snâ€“0.3Ti alloy. Journal of Materials Science, 2010, 45, 919-928.	1.7	19
40	Observation on Isothermal Reactive Diffusion between Solid Fe and Liquid Sn. Materials Transactions, 2012, 53, 1240-1246.	0.4	19
41	Numerical Analysis of Observations on Diffusion Induced Recrystallization in the Ni(Cu) System using A Kinetic Model. Materials Transactions, 2001, 42, 1763-1770.	0.4	18
42	Kinetic features of diffusion induced recrystallization in the Cu(Ni) system at 873 K. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 333, 262-269.	2.6	18
43	Chemical driving force for diffusion-induced recrystallization or diffusion-induced grain boundary migration in a binary system consisting of nonvolatile elements. Scripta Materialia, 2006, 54, 1767-1772.	2.6	18
44	Kinetics of Solid-State Reactive Diffusion between Au and Al. Materials Transactions, 2011, 52, 677-684.	0.4	18
45	Kinetics of diffusion induced grain boundary migration of [100] twist boundaries in the Cu(Zn) system. Acta Materialia, 1999, 47, 1757-1766.	3.8	17
46	Kinetic Features of Reactive Diffusion between Sn–5Au Alloy and Ni at Solid-State Temperatures. Materials Transactions, 2006, 47, 2277-2284.	0.4	17
47	Kinetic Features of Solid-State Reactive Diffusion between Au and Sn-Base Solder. Materials Science Forum, 2007, 539-543, 2473-2478.	0.3	17
48	Analysis for Kinetics of Austenite Growth due to Isothermal Carburization of Ferrite. Materials Transactions, 2010, 51, 1242-1248.	0.4	17
49	Diffusion-induced recrystallization in the Cu(Pd) system at complete solid-solution temperatures. Journal of Materials Science, 2011, 46, 2410-2421.	1.7	17
50	Boundary energies of Î£11 [110] asymmetric tilt boundaries in Cu determined from the shape of boundary silica particles. Acta Materialia, 2000, 48, 2837-2842.	3.8	16
51	Kinetics of Diffusion-Induced Recrystallization in the Cu(Ni) System at Low Temperatures. Journal of Electronic Materials, 2008, 37, 1710-1720.	1.0	16
52	Experimental determination of boundary energies of Î£9 [110] asymmetric tilt boundaries in Cu. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 477, 121-128.	2.6	16
53	Observation on Isothermal Reactive Diffusion between Solid Ni and Liquid Sn. Materials Transactions, 2016, 57, 838-845.	0.4	16
54	Growth behavior of fine grains formed by diffusion induced recrystallization in the Cu(Zn) system. Acta Materialia, 2000, 48, 2959-2968.	3.8	15

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55	Influence of Pd on kinetics of solid-state reactive diffusion between Sn and Ni. Journal of Alloys and Compounds, 2009, 485, 144-149.	2.8	15
56	Rate-Controlling Process of Compound Growth in Cu-Clad Al Wire during Isothermal Annealing at 483â€“543 K. Materials Transactions, 2020, 61, 188-194.	0.4	15
57	Characteristic features of diffusion induced grain boundary migration for Î£9 [110] asymmetric tilt boundaries in the Cu(Zn) system. Acta Materialia, 2000, 48, 1551-1562.	3.8	14
58	Transition of rate-controlling process for reactive diffusion between Ta and bronze in superconductor. Journal of Physics: Conference Series, 2009, 165, 012091.	0.3	14
59	Analysis for Kinetics of Ferrite Growth due to Isothermal Decarburization of Austenite in the Binary Fe–C System. Materials Transactions, 2012, 53, 1896-1904.	0.4	14
60	Thermodynamic evaluation of phase equilibria in the ternary Cuâ€“Crâ€“Ni system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 437, 293-300.	2.6	13
61	Experimental Observation on Solid-State Reactive Diffusion between Snâ€“Ag Alloys and Ni. Materials Transactions, 2017, 58, 561-566.	0.4	13
62	Formation of Intermetallic Compounds and Microstructure Evolution due to Isothermal Reactive Diffusion at the Interface Between Solid Co and Liquid Sn. Journal of Electronic Materials, 2020, 49, 1568-1576.	1.0	13
63	Kinetics of solid-state reactive diffusion between Snâ€“Ni alloys and Pd. Journal of Alloys and Compounds, 2009, 484, 273-279.	2.8	12
64	Kinetics of Solid-State Reactive Diffusion in the Cu/Zn System. Materials Transactions, 2017, 58, 16-22.	0.4	12
65	Quantitative analysis of observations on diffusion induced grain boundary migration for random boundaries in the Cu(Zn) system using a driving force model. Acta Materialia, 1999, 47, 1195-1201.	3.8	11
66	Solid-State Reactive Diffusion between Sn and Electroless Ni–P at 473 K. Materials Transactions, 2009, 50, 130-137.	0.4	11
67	Solid-state reactive diffusion between Ni and W. Journal of Alloys and Compounds, 2011, 509, 4958-4966.	2.8	11
68	Reactive Diffusion between Ag–5Pt Alloy and Sn at Solid-State Temperatures. Materials Transactions, 2007, 48, 2642-2649.	0.4	10
69	Influence of Si on reactive diffusion between Au and Sn at solid-state temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 445-446, 604-610.	2.6	10
70	Influence of Ag on Kinetics of Solid-State Reactive Diffusion between Pd and Sn. Materials Transactions, 2009, 50, 266-274.	0.4	10
71	Kinetics of Solid-State Reactive Diffusion in the (Pd-Ni)/Sn System. Journal of Electronic Materials, 2012, 41, 32-43.	1.0	10
72	Microstructure formed by eutectic reaction in a binary Cuâ€“12.3Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 318, 87-93.	2.6	9

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73	Quantitative Explanation for Uphill Diffusion of Sn during Reactive Diffusion between Cu–Sn Alloys and Nb. Materials Transactions, 2006, 47, 829-837.	0.4	9
74	Effects of Fe, W and Mo on Kinetics of Discontinuous Precipitation in the Ni–Cr System. Materials Transactions, 2012, 53, 1744-1752.	0.4	9
75	Kinetics of Isothermal Reactive Diffusion Between Solid Cu and Liquid Sn. Journal of Electronic Materials, 2018, 47, 18-26.	1.0	9
76	Compound Growth due to Isothermal Annealing of Cu-Clad Al Wire. Materials Transactions, 2019, 60, 895-901.	0.4	9
77	Experimental Observation of Diffusion Reaction in the (Sn-Ag)/Cu System at Solid-State Temperatures. Journal of Electronic Materials, 2019, 48, 1766-1776.	1.0	9
78	Kinetics of Diffusion Induced Recrystallization in the Cu(Al) System. Materials Transactions, 2020, 61, 206-212.	0.4	9
79	Experimental Study on Diffusion Induced Recrystallization in Cu/Fe/Cu Diffusion Couples Using Cu Single Crystals.. ISIJ International, 1997, 37, 590-595.	0.6	7
80	Kinetics of Reactive Diffusion in the (Sn–Cu)/Ni System at Solid-State Temperatures. Materials Transactions, 2015, 56, 798-802.	0.4	7
81	Kinetics of Reactive Diffusion in the Co/Zn System at Solid-State Temperatures. Materials Transactions, 2017, 58, 567-573.	0.4	7
82	Partitioning of Solute Elements and Microstructural Changes during Heat-treatment of Cold-rolled High Strength Steel with Composite Microstructure. ISIJ International, 2020, 60, 1784-1795.	0.6	6
83	Kinetics of Reactive Diffusion in the (Pd-Cu)/Sn System at Solid-State Temperatures. Journal of Electronic Materials, 2014, 43, 247-258.	1.0	5
84	Kinetics of Solid-State Reactive Diffusion in the (Sn–Ni)/Cu System. Materials Transactions, 2014, 55, 1266-1273.	0.4	5
85	Kinetics of Solid-State Reactive Diffusion in the (Pd–Cr)/Sn System. Materials Transactions, 2015, 56, 30-39.	0.4	5
86	Fast Penetration of Cu in Ni of Cu/Ni/Cu Diffusion Couples Due to Diffusion Induced Recrystallization.. ISIJ International, 1998, 38, 489-494.	0.6	5
87	Kinetics of Solid-State Reactive Diffusion in the (Ni-Cr)/Sn System. Journal of Electronic Materials, 2012, 41, 3292-3302.	1.0	4
88	Kinetics and thermodynamics of compound growth due to reactive diffusion between solid Cu and binary Bi-Sn alloys. Journal of Molecular Liquids, 2022, 348, 118063.	2.3	4
89	Influence of head-tip morphology on contact properties for microconnector of Niâ€“Co alloy. Journal of Materials Science: Materials in Electronics, 2013, 24, 3175-3182.	1.1	3
90	Influences of Co, Cu and V on Kinetics of Discontinuous Precipitation in the Ni^|^ndash;Cr System. ISIJ International, 2013, 53, 347-355.	0.6	3

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91	Kinetic Analysis for Contribution of Interface Reaction to Migration of Î³/Î± Interface in Binary Feâ€“C System. Materials Transactions, 2020, 61, 1084-1089.	0.4	3
92	Influence of Isothermal Annealing on Mechanical Properties of Cu-Clad Al Wire. Materials Transactions, 2020, 61, 1149-1157.	0.4	3
93	Title is missing!. Journal of Materials Science, 1999, 7, 181-189.	1.2	2
94	Fracture behavior of â^9 [110] asymmetric tilt boundaries in Cu doped with Bi. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 488, 252-259.	2.6	2
95	Occurrence of Faceting for [110] Symmetric Tilt Boundaries in Cu Doped with Bi. Materials Transactions, 2008, 49, 2584-2590.	0.4	2
96	Compound Growth due to Reactive Diffusion between Solid-Ni and Liquid-Zn. Materials Transactions, 2018, 59, 1872-1877.	0.4	2
97	The release behavior of boron and silicon from degraded absorber rods on core degradation during BWR severe accident. Journal of Nuclear Materials, 2019, 514, 101-108.	1.3	2
98	Kinetic Analysis of Uphill Diffusion of Carbon in Austenite Phase of Low-Carbon Steels. Materials Transactions, 2020, 61, 909-918.	0.4	2
99	Orientation Relationship for Fine Grains Formed by Diffusion-Induced Recrystallization in the Ni(Cu) System. Materials Transactions, 2008, 49, 242-249.	0.4	1
100	Growth Behavior of Compounds during Reactive Diffusion in the Solid-Cu/Liquid-Sn System. Materials Transactions, 2018, 59, 198-203.	0.4	1
101	Effects of Distributions of Constituent Phases on Mechanical Properties of Câ€“Siâ€“Mn Dual-phase Steel. ISIJ International, 2021, 61, 452-462.	0.6	1
102	Partitioning of Solute Elements and Microstructural Changes during Heat-treatment of Cold-rolled High Strength Steel with Composite Microstructure. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2022, 108, 41-53.	0.1	1
103	Reactive Diffusion between Ti and Cu-9.3Sn-0.3Ti Alloy at Solid-State Temperatures. Solid State Phenomena, 0, 172-174, 470-474.	0.3	0
104	Influence of Morphology of Cementite on Kinetics of Austenitization in the Binary Feâ€“C System. Materials Transactions, 2020, 61, 1740-1749.	0.4	0
105	Effects of Distributions of Constituent Phases on Mechanical Properties of Câ€“Siâ€“Mn Dual-phase Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2022, 108, 370-382.	0.1	0