Hideaki Sawada

List of Publications by Year
in descending order

78	4,146	331538 21	110317 64
papers	citations	h-index	g-index

79	79	79	3576
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	First-principles analysis of the grain boundary segregation of transition metal alloying elements in Î³Fe. Computational Materials Science, 2022, 210, 111050.	1.4	20
2	Characterization of age hardening mechanism of low-temperature aged low-carbon steel by transmission electron microscopy. Materials Characterization, 2022, 183, 111579.	1.9	6
3	Application of Grain Boundary Segregation Prediction Using a Nano-Polycrystalline Grain Boundary Model to Transition Metal Solute Elements: Prediction of Grain Boundary Segregation of Mn and Cr in bcc-Fe Polycrystals. Materials Transactions, 2022, 63, 269-277.	0.4	9
4	First-principles computational tensile test of Î³-Fe grain boundaries considering the effect of magnetism: Electronic origin of grain boundary embrittlement due to Zn segregation. Physical Review Materials, 2022, 6, .	0.9	4
5	Crystal Structure Analysis of Top Dross in Molten Zinc Bath by First Principles Calculation and Synchrotron X-ray Diffraction. ISIJ International, 2021, 61, 929-936.	0.6	3
6	Effects of Alloying Elements on Hydrogen Diffusion in Iron. ISIJ International, 2021, 61, 1287-1293.	0.6	7
7	Theoretical Prediction of Grain Boundary Segregation Using Nano-Polycrystalline Grain Boundary Model. Materials Transactions, 2021, 62, 575-581.	0.4	14
8	Interaction between hydrogen and solute atoms in bcc iron. Computational Materials Science, 2021, 198, 110652.	1.4	5
9	Electronic origin of grain boundary segregation of Al, Si, P, and S in bcc-Fe: combined analysis of ab initio local energy and crystal orbital Hamilton population. Modelling and Simulation in Materials Science and Engineering, 2021, 29, 015001.	0.8	18
10	Application of Grain Boundary Segregation Prediction Using a Nano-Polycrystalline Grain Boundary Model to Transition Metal Solute Elements: Prediction of Grain Boundary Segregation of Mn and Cr in bcc-Fe Polycrystals. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2021, 85, 421-429.	0.2	7
11	An answer to the carbon cluster in low-temperature aged ferritic low-carbon steel. Materials Characterization, 2020, 159, 110006.	1.9	6
12	Crystal Structure Analysis of Top Dross in a Molten Zinc Bath by First Principle Calculation and Synchrotron X-ray Diffraction. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 205-213.	0.1	0
13	Analysis of the dynamic behavior and local structure of solid-solution carbon in age-hardened low-carbon steels by soft X-ray absorption spectroscopy. Materialia, 2020, 14, 100876.	1.3	5
14	Observation of Chemical State for Interstitial Solid Solution of Carbon in Low-carbon Steel by Soft X-ray Absorption Spectroscopy. ISIJ International, 2020, 60, 114-119.	0.6	1
15	Changes in States of Carbon and Mechanical Properties with Aging at 50Â°C after Quenching in Low Carbon Steel. Materials Transactions, 2020, 61, 668-677.	0.4	14
16	Dependence of Carbon Concentration and Alloying Elements on the Stability of Iron Carbides. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 352-361.	0.1	1
17	A Determination of Carbon Solubility Limit in Bcc-Iron from Low-Temperature Age Hardening by Bayesian Inference. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 807-815.	0.1	0
18	A Mechanism of Carbon-Cluster Strengthening though Atomic Simulations. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2020, 84, 19-27.	0.2	1

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19	Theoretical Prediction of Grain Boundary Segregation Using Nano-Polycrystalline Grain Boundary Model. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2020, 84, 237-243.	0.2	10
20	A Mechanism of Carbon-Cluster Strengthening through Atomic Simulations. Materials Transactions, 2020, 61, 2139-2148.	0.4	11
21	Dependence of Carbon Concentration and Alloying Elements on the Stability of Iron Carbides. ISIJ International, 2019, 59, 1128-1135.	0.6	16
22	Changes in States of Carbon and Mechanical Properties with Aging at 50â„ƒ after Quenching in Low Carbon Steel. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2019, 83, 353-362.	0.2	5
23	First-principles study on the grain boundary embrittlement of bcc-Fe by Mn segregation. Physical Review Materials, 2019, 3, .	0.9	23
24	Observation of Chemical State for Interstitial Solid Solution of Carbon in Low-carbon Steel by Soft X-ray Absorption Spectroscopy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2018, 104, 628-633.	0.1	3
25	Effect of B on Growth of Recrystallized Grain of Ti-added Ultra-low Carbon Cold-rolled Steel Sheets. ISIJ International, 2018, 58, 1901-1909.	0.6	4
26	Chemical misfit origin of solute strengthening in iron alloys. Acta Materialia, 2017, 131, 445-456.	3.8	36
27	Effect of B on Growth of Recrystallized Grain of Ti-added Ultra-low Carbon Cold-rolled Steel Sheets. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 221-229.	0.1	2
28	Transition of the Interface between Iron and Carbide Precipitate From Coherent to Semi-Coherent. Metals, 2017, 7, 277.	1.0	17
29	Partitioning of Cr and Si between cementite and ferrite derived from first-principles thermodynamics. Acta Materialia, 2016, 102, 241-250.	3.8	17
30	Improvement of Anti-aging Property at Low Temperature by Cr Addition in Bake Hardenable Ultra Low Nitrogen Steels. ISIJ International, 2015, 55, 2648-2656.	0.6	2
31	Importance of Controlling Microstructure Heterogeneity when Designing Steel. , 2015, , 3-9.		0
32	First-principles study of interface structure and energy of Fe/NbC. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 045012.	0.8	38
33	Mechanism of Grain Boundary Embrittlement in Feâ€“Niâ€“S Alloys. ISIJ International, 2013, 53, 1289-1291.	0.6	2
34	First-principles study of grain boundary embrittlement in Feâ€“Niâ€“S alloy. Computational Materials Science, 2012, 55, 17-22.	1.4	16
35	Interaction between Substitutional and Interstitial Elements in α iron Studied by First-principles Calculation. Materials Transactions, 2005, 46, 1140-1147.	0.4	13
36	Interaction between Substitutional and Interstitial Elements in .ALPHA.-Fe Studied by First-Principles Calculation. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2004, 68, 977-982.	0.2	8

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37	Prediction of thermodynamic properties of solute elements in Si solutions using first-principles calculations. Acta Materialia, 2003, 51, 551-559.	3.8	13
38	Atomistic model of nitrogen-pair diffusion in silicon. Physical Review B, 2002, 65, .	1.1	21
39	Full-Potential KKR Calculations for Point Defect Energies in Metals, based on the Generalized-Gradient Approximation: II. Impurity-Impurity Interaction Energies and Phase Diagrams. Materials Transactions, 2001, 42, 2216-2224.	0.4	21
40	First-principles calculation of the interaction between nitrogen atoms and vacancies in silicon. Physical Review B, 2000, 62, 1851-1858.	1.1	107
41	Orbital and charge orderings and magnetism in perovskite-type transition-metal oxides. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 63, 11-16.	1.7	7
42	Electronic structure of oxygen vacancy in Ta2O5. Journal of Applied Physics, 1999, 86, 956-959.	1.1	102
43	Intergrain tunneling magnetoresistance in polycrystals of the ordered double perovskiteSr2FeReO6. Physical Review B, 1999, 59, 11159-11162.	1.1	438
44	First-principles study on electronic structures and phase stability of MnO and FeO under high pressure. Physical Review B, 1999, 59, 762-774.	1.1	116
45	Room-temperature magnetoresistance in an oxide material with an ordered double-perovskite structure. Nature, 1998, 395, 677-680.	13.7	1,883
46	Jahn-Teller distortion and magnetic structures in LaMnO3. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 879-880.	1.0	4
47	Orbital and magnetic orderings in localizedt2gsystems,YTiO3andYVO3: Comparison with a more itinerantegsystemLaMnO3. Physical Review B, 1998, 58, 6831-6836.	1.1	114
48	Inverse versus Normal NiAs Structures as High-Pressure Phases of FeO and MnO. Physical Review Letters, 1998, 81, 1027-1030.	2.9	65
49	Jahn-Teller distortion and magnetic structures inLaMnO3. Physical Review B, 1997, 56, 12154-12160.	1.1	164
50	Electronic band structure and lattice distortion in perovskite transition-metal oxides. Physica B: Condensed Matter, 1997, 237-238, 11-13.	1.3	19
51	Theoretical study of orbital ordering in YTiO3. Physica B: Condensed Matter, 1997, 237-238, 46-47.	1.3	34
52	Orbital and spin orderings inYVO3andLaVO3in the generalized gradient approximation. Physical Review B, 1996, 53, 12742-12749.	1.1	82
53	Effects of the surface and interface on the magneto-optical properties in (Co, Ni)/Cu(001) ultrathin films. Physical Review B, 1996, 54, 15950-15957.	1.1	16
54	The Magneto-Optical Quantum Size Effect in bcc-Fe(001) and (110) Ultrathin Films. Materials Research Society Symposia Proceedings, 1995, 382, 237.	0.1	5

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55	Electronic band structure of La1 â^' xBaxMnO3. Journal of Physics and Chemistry of Solids, 1995, 56, 1719-1720.	1.9	8
56	Phase stability and magnetic property of LaCo1 â^' xNixO3. Journal of Physics and Chemistry of Solids, 1995, 56, 1755-1757.	1.9	5
57	Band Theory for Ground-State Properties and Excitation Spectra of PerovskiteLaMO3(M=Mn, Fe, Co,) Tj ETQq1 1 0.784314 rgBT /Ove	2.9	266
58	Structural, electronic, and magnetic properties ofFe16N2. Physical Review B, 1994, 50, 10004-10008.	1.1	34
59	Electronic structure analysis of magnetic properties of Fe16N2. Journal of Computer-Aided Materials Design, 1993, 1, 75-84.	0.7	2
60	A Study on First Principle Calculation of Alloy Phase Diagram by Monte Carlo Simulation. Materials Research Society Symposia Proceedings, 1992, 291, 135.	0.1	1
61	AN ATTEMPT OF FIRST PRINCIPLE CALCULATION OF ALLOY PHASE DIAGRAM. , 1991, , 779-784.		4
62	Magnetic susceptibility of normal state and superconductivity of La2â^'xSrxCuO4. Physica C: Superconductivity and Its Applications, 1990, 166, 417-422.	0.6	45
63	The 36K and 40K superconductivities of La2CuO4â^'y. Synthetic Metals, 1989, 29, 735-740.	2.1	3
64	Anomalous enhancement of superconductivity observed in La2CuO4â^'y. Solid State Communications, 1988, 65, 1539-1543.	0.9	8
65	Study on copper valency of high-tc superconductor YBa2Cu3O7â^'y by high temperature X-ray absorption spectroscopy. Solid State Communications, 1988, 65, 213-217.	0.9	33
66	Anomalous enhancement of fractional volume of superconductivity in La2CuO4â^'y due to field cooling process. Physica C: Superconductivity and Its Applications, 1988, 153-155, 1495-1496.	0.6	5
67	Weak Flax-Pinning Effect between 230 K and 40 K in La1.8Sr0.2CuO4. Japanese Journal of Applied Physics, 1987, 26, L383-L385.	0.8	5
68	Study of the Infrared Properties of (La1-xSrx)2CuO4. Japanese Journal of Applied Physics, 1987, 26, L426-L428.	0.8	21
69	Superconductivity and Crystal Structure of LaBa2Cu3-xOyCompounds. Japanese Journal of Applied Physics, 1987, 26, L1703-L1706.	0.8	28
70	Magnetization Property of Annealed La1.85Sr0.15CuO4from 300 K to 5 K. Japanese Journal of Applied Physics, 1987, 26, L316-L317.	0.8	3
71	Preparation and Property of La1.85Sr0.15CuO4Single Crystal. Japanese Journal of Applied Physics, 1987, 26, L386-L387.	0.8	20
72	The Dependence of the Superconducting Transition upon the Quench Temperature of YBa2Cu3Oy. Japanese Journal of Applied Physics, 1987, 26, L1054-L1056.	0.8	62

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73	Identification of a Structure with Two Superconducting Phases in L-Ba-Cu-O System (L=La or Y). Japanese Journal of Applied Physics, 1987, 26, L621-L623.	0.8	9
74	Superconducting Properties of La1.85Sr0.15CuO4Made by Hot-Press and Sinter Methods. Japanese Journal of Applied Physics, 1987, 26, L311-L313.	0.8	11
75	Infrared properties of the oxygen-deficient triperovskite YBa2Cu3Oy compound. Solid State Communications, 1987, 64, 1047-1050.	0.9	16
76	Infrared Properties of the HighTcSuperconductor (La, Y)â€“Baâ€“Cuâ€“O and Laâ€“Srâ€“Cuâ€“O Compounds. Japanese Journal of Applied Physics, 1987, 26, 1011.	0.8	1
77	Correlation of Layered Structure and Superconductivity in (La, Y)â€“Baâ€“Cuâ€“O System. Japanese Journal of Applied Physics, 1987, 26, 1065.	0.8	1
78	Oxygen-Intercalation Effect upon Tetragonal-LaBa2Cu3â^'xOy Compound Samples. , 1987, , 1089-1093.		0