Ryusuke Nakamura

List of Publications by Year
in descending order

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61	1,296	516215 16	360668 35
papers	citations	h-index	g-index

62	62	62	1575
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hollow oxide formation by oxidation of Al and Cu nanoparticles. Journal of Applied Physics, 2007, 101, 074303.	1.1	181
2	Oxidation behaviour of Ni nanoparticles and formation process of hollow NiO. Philosophical Magazine, 2008, 88, 257-264.	0.7	124
3	Formation of hollow ZnO through low-temperature oxidation of Zn nanoparticles. Materials Letters, 2007, 61, 1060-1063.	1.3	112
4	The Kirkendall effect and nanoscience: hollow nanospheres and nanotubes. Beilstein Journal of Nanotechnology, 2015, 6, 1348-1361.	1.5	108
5	Single-phase interdiffusion in the B2 type intermetallic compounds NiAl, CoAl and FeAl. Intermetallics, 2002, 10, 195-204.	1.8	102
6	Diffusion of oxygen in amorphous Al2O3, Ta2O5, and Nb2O5. Journal of Applied Physics, 2014, 116, .	1.1	76
7	Formation of oxide nanotubes via oxidation of Fe, Cu and Ni nanowires and their structural stability: Difference in formation and shrinkage behavior of interior pores. Acta Materialia, 2009, 57, 5046-5052.	3.8	66
8	Atomic rearrangements in amorphous Al2O3 under electron-beam irradiation. Journal of Applied Physics, 2013, 113, .	1.1	64
9	Shrinking of hollow Cu2O and NiO nanoparticles at high temperatures. Acta Materialia, 2008, 56, 5276-5284.	3.8	57
10	Diffusion mechanisms in B2 NiAl phase studied by experiments on Kirkendall effect and interdiffusion under high pressures. Acta Materialia, 2003, 51, 3861-3870.	3.8	42
11	Transmission electron microscopy observation of oxide layer growth on Cu nanoparticles and formation process of hollow oxide particles. Journal of Materials Research, 2007, 22, 2930-2935.	1.2	36
12	Transition in the nanoporous structure of iron oxides during the oxidation of iron nanoparticles and nanowires. Acta Materialia, 2009, 57, 4261-4266.	3.8	35
13	Nanovoid formation by change in amorphous structure through the annealing of amorphous Al2O3 thin films. Acta Materialia, 2011, 59, 4631-4640.	3.8	22
14	Nanovoid formation through the annealing of amorphous Al2O3 and WO3 films. Scripta Materialia, 2011, 64, 197-200.	2.6	21
15	Crystallization of sputter-deposited amorphous Ge films by electron irradiation: Effect of low-flux pre-irradiation. Journal of Applied Physics, 2016, 120, .	1.1	20
16	Structural transition in sputter-deposited amorphous germanium films by aging at ambient temperature. Journal of Applied Physics, 2016, 119, 214309.	1.1	19
17	Self-diffusion of aluminium in the intermetallic compound Fe-48 at.% Al. Philosophical Magazine, 2003, 83, 477-483.	0.7	16
18	Enhancement of nanovoid formation in annealed amorphous Al2O3 including W. Journal of Applied Physics, 2011, 110, 064324.	1.1	13

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19	Thermal crystallization of sputter-deposited amorphous Ge films: Competition of diamond cubic and hexagonal phases. AIP Advances, 2016, 6, 125035.	0.6	12
20	Thermal analysis of lattice defects in LaNi5. Journal of Alloys and Compounds, 2006, 413, 211-213.	2.8	11
21	Direct observations of crystallization processes of amorphous GeSn during thermal annealing: A temperature window for suppressing Sn segregation. Journal of Applied Physics, 2019, 125, .	1.1	11
22	Precise Measurement of Low Diffusion Coefficients Using Radioactive Tracers. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2005, 69, 321-331.	0.2	10
23	Nanoscale surface self-patterning of FeAl single crystals by vacancy absorption process. Applied Physics Letters, 2006, 89, 073110.	1.5	10
24	The relation between amorphous structure and explosive crystallization of sputter-deposited amorphous germanium thin films. Japanese Journal of Applied Physics, 2019, 58, 045501.	0.8	9
25	Diffusion in Intermetallic Compounds and Fabrication of Hollow Nanoparticles through Kirkendall Effect. Journal of Nano Research, 0, 7, 1-10.	0.8	8
26	Self-elongated growth of nanopores in annealed amorphous Ta2O5 films. Scripta Materialia, 2012, 66, 182-185.	2.6	8
27	Dual crystallization modes of sputter-deposited amorphous SiGe films. Journal of Applied Physics, 2020, 128, 015303.	1.1	8
28	Interdiffusion in B2 Type Intermetallic Compound FeAl under High Pressures. Materials Transactions, 2003, 44, 78-82.	0.4	7
29	Self-diffusion of cobalt in B2 type intermetallic compound CoAl. Intermetallics, 2005, 13, 163-167.	1.8	7
30	Formation of highly oriented nanopores via crystallization of amorphous Nb2O5 and Ta2O5. Journal of Applied Physics, 2013, 114, 124308.	1.1	7
31	Low-temperature synthesis of crystalline GeSn with high Sn concentration by electron excitation effect. Japanese Journal of Applied Physics, 2017, 56, 100307.	0.8	7
32	Liquid-mediated crystallization of amorphous GeSn under electron beam irradiation. Journal of Applied Physics, 2020, 127, 205304.	1.1	7
33	Structure of crystallized particles in sputter-deposited amorphous germanium films. Journal of Applied Crystallography, 2018, 51, 1467-1473.	1.9	7
34	Structural stability of hollow oxide nanoparticles at high temperatures. Journal of Physics: Conference Series, 2009, 165, 012072.	0.3	6
35	Permeation and diffusion of hydrogen in vanadium using deoxidation and glow-discharge surface cleaning techniques. Journal of Membrane Science, 2020, 614, 118522.	4.1	6
36	Electron diffraction radial distribution function analysis of amorphous boron carbide synthesized by ion beam irradiation and chemical vapor deposition. Journal of the European Ceramic Society, 2022, 42, 376-382.	2.8	5

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37	Supersaturated vacancies and vacancy complexes in rapidly solidified B2 aluminide ribbons. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 1036-1040.	2.6	4
38	Fabrication of Hollow Nano Particles of Metallic Oxides through Oxidation Process. Materials Science Forum, 2010, 638-642, 67-72.	0.3	4
39	Formation of Hollow Copper Oxide by Oxidation of Cu Nanoparticles. Current Nanoscience, 2014, 10, 101-103.	0.7	4
40	Stability of amorphous Taâ€“O nanotubes prepared by anodization: Thermal and structural analyses. Journal of Materials Research, 2014, 29, 753-760.	1.2	4
41	Explosive crystallization of sputter-deposited amorphous germanium films by irradiation with an electron beam of SEM-level energies. Journal of Applied Physics, 2021, 129, .	1.1	4
42	Interdiffusion in Fe/Pt Bulk Diffusion Couples. Defect and Diffusion Forum, 2005, 237-240, 426-431.	0.4	3
43	é‡'å±žãƒŠãƒŽç²'åé®é…,åŒ–ã«ã‚ˆã‚‹ç©ºæ§‹é€ä½"ã®å½¢æˆ. Materia Japan, 2008, 47, 368-374.	0.1	3
44	Activation volume for interdiffusion in bcc ordered and disordered phases of the Feâ€“Al system. Philosophical Magazine, 2004, 84, 1907-1926.	0.7	2
45	Oxidation Behavior of Cu Nanoparticles and Formation of Hollow Cu₂O Spheres. Materials Science Forum, 2007, 561-565, 1703-1706.	0.3	2
46	Activation Volume for Interdiffusion in B2 Type Intermetallic Compounds NiAl and FeAl. Defect and Diffusion Forum, 2005, 237-240, 364-369.	0.4	1
47	Formation of Hollow Zinc Oxide by Oxidation and Subsequent Thermal Treatment. Solid State Phenomena, 0, 135, 11-14.	0.3	1
48	Application of the Kirkendall Effect to Morphology Control of Nanowires: Morphology Change from Metal Nanowires to Oxide Nanotubes. , 0, , .		1
49	Crystallization Processes of Amorphous GeSn Thin Films by Heat Treatment and Electron Beam Irradiation. Microscopy and Microanalysis, 2017, 23, 2046-2047.	0.2	1
50	Preparation of Amorphous Fe-B Films by Sputtering and Their Structure Analysed by Transmission Electron Microscopy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2019, 105, 1017-1021.	0.1	1
51	Measurement of Diffusion Profile of Boron in Î± Iron by Secondary-ion Mass Spectrometry and Determination of Its Diffusion Coefficient. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 302-309.	0.1	1
52	Formation of Oxide Nanotubes and Bamboo-Like Structures via Oxidation of Cu, Fe and Ni Nanowires. Materials Science Forum, 2010, 658, 232-235.	0.3	0
53	Formation of Hollow and Porous Nanostructures of Iron Oxides via Oxidation of Iron Nanoparticles and Nanowires. Materials Science Forum, 2010, 658, 197-200.	0.3	0
54	Recent Progress in Fabrication of Hollow Nanostructures. Advanced Structured Materials, 2010, , 3-30.	0.3	0

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55	TEM Analysis on Nanovoid Formation in Annealed Amorphous Oxides. Materials Science Forum, 0, 695, 541-544.	0.3	0
56	Theoretical Evaluation of Anisotropic Distortion Associated with Point Defects in Ordered Compounds. Defect and Diffusion Forum, 0, 363, 101-105.	0.4	0
57	Anomalous hardening and microstructural evolution accompanied by reordering and restoring of plastically deformed Co3Ti. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 620, 411-419.	2.6	0
58	Low Temperature Crystallization of Amorphous Materials by Electron Excitation Effects. Nihon Kessho Gakkaishi, 2019, 61, 29-34.	0.0	0
59	Effects of hydrogen on structure and crystallization behavior of sputter-deposited amorphous germanium films. Japanese Journal of Applied Physics, 2020, 59, 075506.	0.8	0
60	Fabrication of Hollow Nanostructured Oxides via Oxidation of Metal Nanoparticles and Nanowires and their Structural Stability. Journal of Smart Processing, 2012, 1, 20-24.	0.0	0
61	Behavior of Sn Atoms During Crystallization of Amorphous GeSn. Materia Japan, 2020, 59, 662-668.	0.1	0