

# Ryusuke Nakamura

## List of Publications by Year in descending order

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61  
papers

1,296  
citations

516561

16  
h-index

360920

35  
g-index

62  
all docs

62  
docs citations

62  
times ranked

1575  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electron diffraction radial distribution function analysis of amorphous boron carbide synthesized by ion beam irradiation and chemical vapor deposition. <i>Journal of the European Ceramic Society</i> , 2022, 42, 376-382.	2.8	5
2	Explosive crystallization of sputter-deposited amorphous germanium films by irradiation with an electron beam of SEM-level energies. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	4
3	Permeation and diffusion of hydrogen in vanadium using deoxidation and glow-discharge surface cleaning techniques. <i>Journal of Membrane Science</i> , 2020, 614, 118522.	4.1	6
4	Effects of hydrogen on structure and crystallization behavior of sputter-deposited amorphous germanium films. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 075506.	0.8	0
5	Liquid-mediated crystallization of amorphous GeSn under electron beam irradiation. <i>Journal of Applied Physics</i> , 2020, 127, 205304.	1.1	7
6	Dual crystallization modes of sputter-deposited amorphous SiGe films. <i>Journal of Applied Physics</i> , 2020, 128, 015303.	1.1	8
7	Behavior of Sn Atoms During Crystallization of Amorphous GeSn. <i>Materia Japan</i> , 2020, 59, 662-668.	0.1	0
8	Measurement of Diffusion Profile of Boron in $\delta$ -Fe by Secondary-ion Mass Spectrometry and Determination of Its Diffusion Coefficient. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2020, 106, 302-309.	0.1	1
9	Low Temperature Crystallization of Amorphous Materials by Electron Excitation Effects. <i>Nihon Kessho Gakkaishi</i> , 2019, 61, 29-34.	0.0	0
10	Direct observations of crystallization processes of amorphous GeSn during thermal annealing: A temperature window for suppressing Sn segregation. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	11
11	The relation between amorphous structure and explosive crystallization of sputter-deposited amorphous germanium thin films. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 045501.	0.8	9
12	Preparation of Amorphous Fe-B Films by Sputtering and Their Structure Analysed by Transmission Electron Microscopy. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2019, 105, 1017-1021.	0.1	1
13	Structure of crystallized particles in sputter-deposited amorphous germanium films. <i>Journal of Applied Crystallography</i> , 2018, 51, 1467-1473.	1.9	7
14	Low-temperature synthesis of crystalline GeSn with high Sn concentration by electron excitation effect. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 100307.	0.8	7
15	Crystallization Processes of Amorphous GeSn Thin Films by Heat Treatment and Electron Beam Irradiation. <i>Microscopy and Microanalysis</i> , 2017, 23, 2046-2047.	0.2	1
16	Thermal crystallization of sputter-deposited amorphous Ge films: Competition of diamond cubic and hexagonal phases. <i>AIP Advances</i> , 2016, 6, 125035.	0.6	12
17	Crystallization of sputter-deposited amorphous Ge films by electron irradiation: Effect of low-flux pre-irradiation. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	20
18	Structural transition in sputter-deposited amorphous germanium films by aging at ambient temperature. <i>Journal of Applied Physics</i> , 2016, 119, 214309.	1.1	19

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19	The Kirkendall effect and nanoscience: hollow nanospheres and nanotubes. Beilstein Journal of Nanotechnology, 2015, 6, 1348-1361.	1.5	108
20	Anomalous hardening and microstructural evolution accompanied by reordering and restoring of plastically deformed Co <sub>3</sub> Ti. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 620, 411-419.	2.6	0
21	Formation of Hollow Copper Oxide by Oxidation of Cu Nanoparticles. Current Nanoscience, 2014, 10, 101-103.	0.7	4
22	Stability of amorphous Ta <sup>+</sup> O nanotubes prepared by anodization: Thermal and structural analyses. Journal of Materials Research, 2014, 29, 753-760.	1.2	4
23	Diffusion of oxygen in amorphous Al <sub>2</sub> O <sub>3</sub> , Ta <sub>2</sub> O <sub>5</sub> , and Nb <sub>2</sub> O <sub>5</sub> . Journal of Applied Physics, 2014, 116, .	1.1	76
24	Atomic rearrangements in amorphous Al <sub>2</sub> O <sub>3</sub> under electron-beam irradiation. Journal of Applied Physics, 2013, 113, .	1.1	64
25	Formation of highly oriented nanopores via crystallization of amorphous Nb <sub>2</sub> O <sub>5</sub> and Ta <sub>2</sub> O <sub>5</sub> . Journal of Applied Physics, 2013, 114, 124308.	1.1	7
26	Self-elongated growth of nanopores in annealed amorphous Ta <sub>2</sub> O <sub>5</sub> films. Scripta Materialia, 2012, 66, 182-185.	2.6	8
27	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
28	Enhancement of nanovoid formation in annealed amorphous Al <sub>2</sub> O <sub>3</sub> including W. Journal of Applied Physics, 2011, 110, 064324.	1.1	13
29	Nanovoid formation through the annealing of amorphous Al <sub>2</sub> O <sub>3</sub> and WO <sub>3</sub> films. Scripta Materialia, 2011, 64, 197-200.	2.6	21
30	Nanovoid formation by change in amorphous structure through the annealing of amorphous Al <sub>2</sub> O <sub>3</sub> thin films. Acta Materialia, 2011, 59, 4631-4640.	3.8	22
31	Fabrication of Hollow Nano Particles of Metallic Oxides through Oxidation Process. Materials Science Forum, 2010, 638-642, 67-72.	0.3	4
32	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
33	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
34	Recent Progress in Fabrication of Hollow Nanostructures. Advanced Structured Materials, 2010, , 3-30.	0.3	0
35	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
36	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

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37	Structural stability of hollow oxide nanoparticles at high temperatures. Journal of Physics: Conference Series, 2009, 165, 012072.	0.3	6
38	Shrinking of hollow Cu <sub>2</sub> O and NiO nanoparticles at high temperatures. Acta Materialia, 2008, 56, 5276-5284.	3.8	57
39	Oxidation behaviour of Ni nanoparticles and formation process of hollow NiO. Philosophical Magazine, 2008, 88, 257-264.	0.7	124
40	é†â±žāfŠāfŽç²'āēé...āĒ-ā«ā,ā,ç©°æš«éĒā½"ā@ā½çæˆ: Materia Japan, 2008, 47, 368-374.	0.1	3
41	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
42	Oxidation Behavior of Cu Nanoparticles and Formation of Hollow Cu <sub>2</sub> O Spheres. Materials Science Forum, 2007, 561-565, 1703-1706.	0.3	2
43	Hollow oxide formation by oxidation of Al and Cu nanoparticles. Journal of Applied Physics, 2007, 101, 074303.	1.1	181
44	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
45	Formation of hollow ZnO through low-temperature oxidation of Zn nanoparticles. Materials Letters, 2007, 61, 1060-1063.	1.3	112
46	Thermal analysis of lattice defects in LaNi <sub>5</sub> . Journal of Alloys and Compounds, 2006, 413, 211-213.	2.8	11
47	Nanoscale surface self-patterning of FeAl single crystals by vacancy absorption process. Applied Physics Letters, 2006, 89, 073110.	1.5	10
48	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
49	Interdiffusion in Fe/Pt Bulk Diffusion Couples. Defect and Diffusion Forum, 2005, 237-240, 426-431.	0.4	3
50	Activation Volume for Interdiffusion in B2 Type Intermetallic Compounds NiAl and FeAl. Defect and Diffusion Forum, 2005, 237-240, 364-369.	0.4	1
51	Self-diffusion of cobalt in B2 type intermetallic compound CoAl. Intermetallics, 2005, 13, 163-167.	1.8	7
52	Activation volume for interdiffusion in bcc ordered and disordered phases of the Fe-Al system. Philosophical Magazine, 2004, 84, 1907-1926.	0.7	2
53	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
54	Self-diffusion of aluminium in the intermetallic compound Fe-48 at.% Al. Philosophical Magazine, 2003, 83, 477-483.	0.7	16

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55	Interdiffusion in B2 Type Intermetallic Compound FeAl under High Pressures. Materials Transactions, 2003, 44, 78-82.	0.4	7
56	Single-phase interdiffusion in the B2 type intermetallic compounds NiAl, CoAl and FeAl. Intermetallics, 2002, 10, 195-204.	1.8	102
57	Formation of Hollow Zinc Oxide by Oxidation and Subsequent Thermal Treatment. Solid State Phenomena, 0, 135, 11-14.	0.3	1
58	Diffusion in Intermetallic Compounds and Fabrication of Hollow Nanoparticles through Kirkendall Effect. Journal of Nano Research, 0, 7, 1-10.	0.8	8
59	Application of the Kirkendall Effect to Morphology Control of Nanowires: Morphology Change from Metal Nanowires to Oxide Nanotubes. , 0, , .		1
60	TEM Analysis on Nanovoid Formation in Annealed Amorphous Oxides. Materials Science Forum, 0, 695, 541-544.	0.3	0
61	Theoretical Evaluation of Anisotropic Distortion Associated with Point Defects in Ordered Compounds. Defect and Diffusion Forum, 0, 363, 101-105.	0.4	0