

# Yukinori Yamamoto

## List of Publications by Year in descending order

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84  
papers

4,325  
citations

101543

36  
h-index

114465

63  
g-index

90  
all docs

90  
docs citations

90  
times ranked

1871  
citing authors

#	ARTICLE	IF	CITATIONS
1	Development and property evaluation of nuclear grade wrought FeCrAl fuel cladding for light water reactors. <i>Journal of Nuclear Materials</i> , 2015, 467, 703-716.	2.7	349
2	Creep-Resistant, Al <sub>2</sub> O <sub>3</sub> -Forming Austenitic Stainless Steels. <i>Science</i> , 2007, 316, 433-436.	12.6	337
3	Radiation tolerance of neutron-irradiated model Fe-Cr-Al alloys. <i>Journal of Nuclear Materials</i> , 2015, 465, 746-755.	2.7	210
4	Alumina-Forming Austenitic Stainless Steels Strengthened by Laves Phase and MC Carbide Precipitates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2737-2746.	2.2	139
5	The development of alumina-forming austenitic stainless steels for high-temperature structural use. <i>Jom</i> , 2008, 60, 12-18.	1.9	136
6	Composition, Microstructure, and Water Vapor Effects on Internal/External Oxidation of Alumina-Forming Austenitic Stainless Steels. <i>Oxidation of Metals</i> , 2009, 72, 311-333.	2.1	134
7	Effects of minor alloy additions and oxidation temperature on protective alumina scale formation in creep-resistant austenitic stainless steels. <i>Scripta Materialia</i> , 2007, 57, 1117-1120.	5.2	132
8	Overview of Strategies for High-Temperature Creep and Oxidation Resistance of Alumina-Forming Austenitic Stainless Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 922-931.	2.2	131
9	A combined APT and SANS investigation of $\delta$ phase precipitation in neutron-irradiated model FeCrAl alloys. <i>Acta Materialia</i> , 2017, 129, 217-228.	7.9	131
10	Alloying effects on creep and oxidation resistance of austenitic stainless steel alloys employing intermetallic precipitates. <i>Intermetallics</i> , 2008, 16, 453-462.	3.9	130
11	Solute segregation at the Al/ $\delta$ -Al <sub>2</sub> Cu interface in Al-Cu alloys. <i>Acta Materialia</i> , 2017, 141, 327-340.	7.9	121
12	Effects of Laves phase particles on recovery and recrystallization behaviors of Nb-containing FeCrAl alloys. <i>Acta Materialia</i> , 2018, 144, 716-727.	7.9	120
13	Mechanical properties of neutron-irradiated model and commercial FeCrAl alloys. <i>Journal of Nuclear Materials</i> , 2017, 489, 118-128.	2.7	114
14	Co-optimization of wrought alumina-forming austenitic stainless steel composition ranges for high-temperature creep and oxidation/corrosion resistance. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 590, 101-115.	5.6	109
15	Development of L12-ordered Ni <sub>3</sub> (Al,Ti)-strengthened alumina-forming austenitic stainless steel alloys. <i>Scripta Materialia</i> , 2013, 69, 816-819.	5.2	99
16	Design, properties, and weldability of advanced oxidation-resistant FeCrAl alloys. <i>Materials and Design</i> , 2017, 129, 227-238.	7.0	98
17	Effect of Alloying Additions on Phase Equilibria and Creep Resistance of Alumina-Forming Austenitic Stainless Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 1868-1880.	2.2	97
18	Microstructural control of FeCrAl alloys using Mo and Nb additions. <i>Materials Characterization</i> , 2017, 132, 126-131.	4.4	90

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19	Elevated temperature microstructural stability in cast AlCuMnZr alloys through solute segregation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 765, 138279.	5.6	89
20	Increasing the Upper Temperature Oxidation Limit of Alumina Forming Austenitic Stainless Steels in Air with Water Vapor. <i>Oxidation of Metals</i> , 2011, 75, 337-357.	2.1	85
21	Effect of Al and Cr Content on Air and Steam Oxidation of FeCrAl Alloys and Commercial APMT Alloy. <i>Oxidation of Metals</i> , 2017, 87, 431-441.	2.1	74
22	Modern data analytics approach to predict creep of high-temperature alloys. <i>Acta Materialia</i> , 2019, 168, 321-330.	7.9	69
23	Deformation behavior of laser welds in high temperature oxidation resistant Fe-Cr-Al alloys for fuel cladding applications. <i>Journal of Nuclear Materials</i> , 2014, 454, 352-358.	2.7	67
24	Aging effects on the mechanical properties of alumina-forming austenitic stainless steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 2079-2086.	5.6	61
25	Evaluation of Mn substitution for Ni in alumina-forming austenitic stainless steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 524, 176-185.	5.6	56
26	Processability evaluation of a Mo-containing FeCrAl alloy for seamless thin-wall tube fabrication. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 700, 554-561.	5.6	53
27	Effect of thermomechanical treatment on 9Cr ferritic-martensitic steels. <i>Journal of Nuclear Materials</i> , 2013, 441, 713-717.	2.7	51
28	Material Selection for Accident Tolerant Fuel Cladding. <i>Metallurgical and Materials Transactions E</i> , 2015, 2, 190-196.	0.5	49
29	Heterogeneous dislocation loop formation near grain boundaries in a neutron-irradiated commercial FeCrAl alloy. <i>Journal of Nuclear Materials</i> , 2017, 483, 54-61.	2.7	49
30	Cold compaction study of Armstrong Process® Ti-6Al-4V powders. <i>Powder Technology</i> , 2011, 214, 194-199.	4.2	46
31	Correlation of precipitate stability to increased creep resistance of Cr-Mo steel welds. <i>Acta Materialia</i> , 2013, 61, 2194-2206.	7.9	46
32	Materials challenges for the fusion nuclear science facility. <i>Fusion Engineering and Design</i> , 2018, 135, 290-301.	1.9	46
33	Microstructure evolution of alloy 625 foil and sheet during creep at 750°C. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 498, 412-420.	5.6	45
34	Dislocation loop formation in model FeCrAl alloys after neutron irradiation below 1 dpa. <i>Journal of Nuclear Materials</i> , 2017, 495, 20-26.	2.7	45
35	Hydrothermal corrosion of 2nd generation FeCrAl alloys for accident tolerant fuel cladding. <i>Journal of Nuclear Materials</i> , 2020, 536, 152221.	2.7	45
36	The investigation of die-pressing and sintering behavior of ITP CP-Ti and Ti-6Al-4V powders. <i>Journal of Alloys and Compounds</i> , 2012, 541, 440-447.	5.5	40

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37	Coupling physics in machine learning to predict properties of high-temperatures alloys. Npj Computational Materials, 2020, 6, .	8.7	37
38	Impact toughness of commercial and model FeCrAl alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 93-101.	5.6	35
39	On the Loss of Protective Scale Formation in Creep-Resistant, Alumina-Forming Austenitic Stainless Steels at 900Å°C in Air. Materials Science Forum, 0, 595-598, 725-732.	0.3	31
40	Advanced alloys for compact, high-efficiency, high-temperature heat-exchangers. International Journal of Hydrogen Energy, 2007, 32, 3622-3630.	7.1	30
41	A comprehensive study on the fabrication and characterization of Ti-48Al-2Cr-2Nb preforms manufactured using electron beam melting. Materialia, 2019, 6, 100284.	2.7	30
42	Consolidation Process in Near Net Shape Manufacturing of Armstrong CP-Ti/Ti-6Al-4V Powders. Key Engineering Materials, 0, 436, 103-111.	0.4	29
43	In-situ tube burst testing and high-temperature deformation behavior of candidate materials for accident tolerant fuel cladding. Journal of Nuclear Materials, 2015, 466, 417-425.	2.7	23
44	Development of Cast Alumina-Forming Austenitic Stainless Steels. Jom, 2016, 68, 2803-2810.	1.9	21
45	Development of 1100Å°C Capable Alumina-Forming Austenitic Alloys. Oxidation of Metals, 2017, 87, 1-10.	2.1	21
46	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.	5.6	20
47	Mechanical properties and microstructure characterization of Eurofer97 steel variants in EUROfusion program. Fusion Engineering and Design, 2019, 146, 2227-2232.	1.9	20
48	Heterogeneous Creep Deformations and Correlation to Microstructures in Fe-30Cr-3Al Alloys Strengthened by an Fe <sub>2</sub> Nb Laves Phase. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 4598-4614.	2.2	19
49	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.	5.6	18
50	Kinetics of diffusion induced grain boundary migration of [100] twist boundaries in the Cu(Zn) system. Acta Materialia, 1999, 47, 1757-1766.	7.9	17
51	Investigation of Pressing and Sintering Processes of CP-Ti Powder Made by Armstrong Process. Key Engineering Materials, 0, 436, 123-130.	0.4	17
52	Science and Technology of High Performance Ferritic (HiperFer) Stainless Steels. Metals, 2020, 10, 463.	2.3	17
53	Kinetics of Diffusion-Induced Recrystallization in the Cu(Ni) System at Low Temperatures. Journal of Electronic Materials, 2008, 37, 1710-1720.	2.2	16
54	Improved irradiation resistance of accident-tolerant high-strength FeCrAl alloys with heterogeneous structures. Acta Materialia, 2022, 231, 117843.	7.9	16

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55	Toward Improving the Type IV Cracking Resistance in Cr-Mo Steel Weld Through Thermo-Mechanical Processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2188-2200.	2.2	15
56	Chromium evaporation and oxidation characteristics of alumina-forming austenitic stainless steels for balance of plant applications in solid oxide fuel cells. International Journal of Hydrogen Energy, 2021, 46, 21619-21633.	7.1	15
57	Evaluation of Alumina-Forming Austenitic Foil for Advanced Recuperators. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	14
58	Deconvoluting the Effect of Chromium and Aluminum on the Radiation Response of Wrought FeCrAl Alloys After Low-Dose Neutron Irradiation. Journal of Nuclear Materials, 2021, 549, 152804.	2.7	13
59	Current Status of Ti PM: Progress, Opportunities and Challenges. Key Engineering Materials, 2012, 520, 1-7.	0.4	12
60	Alloy Corrosion Considerations in Low-Cost, Clean Biomass Cookstoves for the Developing World. Energy for Sustainable Development, 2017, 37, 20-32.	4.5	12
61	Materials-engineering challenges for the fusion core and lifetime components of the fusion nuclear science facility. Nuclear Materials and Energy, 2018, 16, 82-87.	1.3	12
62	Validation of an alloy design strategy for stable Fe-Cr-Al-Nb-X ferritic alloys using electron microscopy and atom probe tomography. Materials Characterization, 2019, 158, 109987.	4.4	12
63	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.	7.9	11
64	Investigating the effect of different shielding gas mixtures on microstructure and mechanical properties of 410 stainless steel fabricated via large scale additive manufacturing. Additive Manufacturing, 2021, 38, 101821.	3.0	9
65	Physical metallurgy of single crystal gamma titanium aluminide alloys:. Intermetallics, 2005, 13, 965-970.	3.9	8
66	Role of Cr Content in Microstructure, Creep, and Oxidation Resistance of Alumina-Forming Austenitic Alloys at 850-900 °C. Metals, 2022, 12, 717.	2.3	8
67	Titanium Sheet Fabricated from Powder for Industrial Applications. Jom, 2012, 64, 566-571.	1.9	7
68	Field and Laboratory Evaluations of Commercial and Next-Generation Alumina-Forming Austenitic Foil for Advanced Recuperators. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	6
69	Development of Creep-Resistant, Alumina-Forming Ferrous Alloys for High-Temperature Structural Use. , 2018, , .		6
70	Uncertainty Quantification of Machine Learning Predicted Creep Property of Alumina-Forming Austenitic Alloys. Jom, 2021, 73, 164-173.	1.9	6
71	Compatibility of Alumina-Forming Austenitic Steels in Static and Flowing Pb. Jom, 2021, 73, 4016-4022.	1.9	5
72	Creep and Oxidation Behavior of Modified CF8C-Plus with W, Cu, Ni, and Cr. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 1641-1653.	2.2	4

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73	Irradiation-induced amorphization of Fe-Y-based second phase particles in accident-tolerant FeCrAl alloys. <i>Materialia</i> , 2021, 15, 101016.	2.7	4
74	Development of Alumina-Forming Austenitic Alloys for Solid Oxide Fuel Cell Balance of Plant Components. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 794-794.	0.0	4
75	Generation of two-dimensional electron gas to normally depleted AlGaN/GaN heterostructure interface by SiO <sub>2</sub> deposition and subsequent high-temperature annealing. <i>Electronics Letters</i> , 2021, 57, 670.	1.0	3
76	Creep Behavior and Phase Equilibria in Model Precipitate Strengthened Alumina-Forming Austenitic Alloys. <i>Jom</i> , 2022, 74, 1453-1468.	1.9	3
77	Title is missing!. <i>Journal of Materials Science</i> , 1999, 7, 181-189.	1.2	2
78	Accident Tolerant FeCrAl Fuel Cladding: Current Status Towards Commercialization. <i>Minerals, Metals and Materials Series</i> , 2018, , 165-173.	0.4	2
79	Age Induced Gamma Prime Coarsening and Hardness Behavior in Pyromet 31V. <i>Microscopy and Microanalysis</i> , 2006, 12, 1044-1045.	0.4	1
80	Complementary Techniques for Quantification of $\delta'$ Phase Precipitation in Neutron-Irradiated Fe-Cr-Al Model Alloys. <i>Microscopy and Microanalysis</i> , 2016, 22, 1470-1471.	0.4	1
81	Mechanical Behavior and Structure of Advanced Fe-Cr-Al Alloy Weldments. <i>Minerals, Metals and Materials Series</i> , 2019, , 1417-1430.	0.4	1
82	Thermochemical Compatibility and Oxidation Resistance of Advanced LWR Fuel Cladding. <i>Nuclear Technology</i> , 2016, 195, 181-191.	1.2	0
83	Mechanical Behavior and Structure of Advanced Fe-Cr-Al Alloy Weldments. <i>Minerals, Metals and Materials Series</i> , 2018, , 201-214.	0.4	0
84	Role of Glasgow prognostic score in chemo-naïve patients with advanced biliary tract cancer and good performance status. <i>Annals of Oncology</i> , 2019, 30, ix52.	1.2	0