

Yoshitaka Matsukawa

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6170386/publications.pdf>

Version: 2024-02-01

66
papers

1,876
citations

236833

25
h-index

265120

42
g-index

66
all docs

66
docs citations

66
times ranked

1313
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation and analysis of defect cluster production and interactions with dislocations. Journal of Nuclear Materials, 2004, 329-333, 88-96.	1.3	209
2	One-Dimensional Fast Migration of Vacancy Clusters in Metals. Science, 2007, 318, 959-962.	6.0	168
3	Microstructural characterization and strengthening mechanisms of a 12Cr-ODS steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 673, 624-632.	2.6	92
4	The two-step nucleation of G-phase in ferrite. Acta Materialia, 2016, 116, 104-113.	3.8	78
5	Dynamic observation of the collapse process of a stacking fault tetrahedron by moving dislocations. Journal of Nuclear Materials, 2004, 329-333, 919-923.	1.3	70
6	Mechanisms of stacking fault tetrahedra destruction by gliding dislocations in quenched gold. Philosophical Magazine, 2008, 88, 581-597.	0.7	54
7	The effect of crystallographic mismatch on the obstacle strength of second phase precipitate particles in dispersion strengthening: bcc Nb particles and nanometric Nb clusters embedded in hcp Zr. Acta Materialia, 2016, 102, 323-332.	3.8	53
8	Irradiation-induced precipitates in a neutron irradiated 304 stainless steel studied by three-dimensional atom probe. Journal of Nuclear Materials, 2011, 418, 62-68.	1.3	52
9	Dislocation-stacking fault tetrahedron interaction: what can we learn from atomic-scale modelling. Journal of Nuclear Materials, 2004, 329-333, 1228-1232.	1.3	51
10	Effects of alloying elements (Sn, Nb, Cr, and Mo) on the microstructure and mechanical properties of zirconium alloys. Journal of Nuclear Science and Technology, 2015, 52, 1162-1173.	0.7	51
11	Destruction processes of large stacking fault tetrahedra induced by direct interaction with gliding dislocations. Journal of Nuclear Materials, 2006, 351, 285-294.	1.3	48
12	Grain boundary segregation in neutron-irradiated 304 stainless steel studied by atom probe tomography. Journal of Nuclear Materials, 2012, 425, 71-75.	1.3	46
13	Investigation on microstructural evolution and hardening mechanism in dilute Zr-Nb binary alloys. Journal of Nuclear Materials, 2016, 481, 117-124.	1.3	46
14	Stress-induced amorphization at moving crack tips in NiTi. Applied Physics Letters, 1998, 73, 473-475.	1.5	44
15	Effects of thermal aging on microstructure and hardness of stainless steel weld-overlay claddings of nuclear reactor pressure vessels. Journal of Nuclear Materials, 2014, 452, 235-240.	1.3	43
16	Microstructural changes of a thermally aged stainless steel submerged arc weld overlay cladding of nuclear reactor pressure vessels. Journal of Nuclear Materials, 2012, 425, 60-64.	1.3	41
17	Plastic Deformation of Metal Thin Films without Involving Dislocations and Anomalous Production of Point Defects. Radiation Effects and Defects in Solids, 2002, 157, 3-24.	0.4	40
18	The collapse of stacking-fault tetrahedra by interaction with gliding dislocations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 366-369.	2.6	35

#	ARTICLE	IF	CITATIONS
19	On the features of dislocation–obstacle interaction in thin films: large-scale atomistic simulation. <i>Philosophical Magazine Letters</i> , 2006, 86, 511-519.	0.5	35
20	Reassessment of oxidation-induced amorphization and dissolution of Nb precipitates in Zr–Nb nuclear fuel cladding tubes. <i>Acta Materialia</i> , 2017, 127, 153-164.	3.8	34
21	Microstructural stability of an as-fabricated 12Cr-ODS steel under elevated-temperature annealing. <i>Journal of Alloys and Compounds</i> , 2017, 695, 1946-1955.	2.8	34
22	Defect Structures Introduced in FCC Metals by High-speed Deformation. <i>Radiation Effects and Defects in Solids</i> , 2002, 157, 53-74.	0.4	33
23	Precipitation of carbides in F82H steels and its impact on mechanical strength. <i>Nuclear Materials and Energy</i> , 2016, 9, 331-337.	0.6	31
24	Study on recrystallization and correlated mechanical properties in Mo-modified Zr-Nb alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 661, 9-18.	2.6	31
25	Crystallographic analysis on atomic-plane parallelisms between bcc precipitates and hcp matrix in recrystallized Zr-2.5Nb alloys. <i>Acta Materialia</i> , 2017, 126, 86-101.	3.8	31
26	Effect of molybdenum on microstructures in Zr-1.2Nb alloys after \hat{I}^2 -quenching and subsequently 873 K annealing. <i>Materials and Design</i> , 2016, 104, 355-364.	3.3	27
27	Effects of neutron irradiation on microstructures and hardness of stainless steel weld-overlay cladding of nuclear reactor pressure vessels. <i>Journal of Nuclear Materials</i> , 2014, 449, 273-276.	1.3	25
28	Electron irradiation effect on phase transformation in Ti–Ni shape memory alloy. <i>Journal of Nuclear Materials</i> , 1996, 239, 261-266.	1.3	21
29	Positron annihilation in Cr, Cu, and Au layers embedded in Al and quantum confinement of positrons in Au clusters. <i>Physical Review B</i> , 2011, 84, .	1.1	21
30	Oxide particle–dislocation interaction in 9Cr-ODS steel. <i>Nuclear Materials and Energy</i> , 2016, 9, 378-382.	0.6	21
31	Effects of Mo addition on precipitation in Zr–1.2Nb alloys. <i>Materials Letters</i> , 2015, 158, 88-91.	1.3	20
32	Effect of neutron irradiation on the microstructure of the stainless steel electrosag weld overlay cladding of nuclear reactor pressure vessels. <i>Journal of Nuclear Materials</i> , 2013, 443, 266-273.	1.3	19
33	Microstructure and mechanical property in heat affected zone (HAZ) in F82H jointed with SUS316L by fiber laser welding. <i>Nuclear Materials and Energy</i> , 2016, 9, 300-305.	0.6	19
34	Microstructure and mechanical properties of neutron irradiated TiNi shape memory alloy. <i>Journal of Nuclear Materials</i> , 1999, 271-272, 106-110.	1.3	16
35	Dynamic observation of dislocation-free plastic deformation in gold thin foils. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 350, 8-16.	2.6	16
36	Microstructural analysis of impurity segregation around \hat{I}^2 -Nb precipitates in Zr–Nb alloy using positron annihilation spectroscopy and atom probe tomography. <i>Scripta Materialia</i> , 2015, 108, 156-159.	2.6	15

#	ARTICLE	IF	CITATIONS
37	Dynamic observation of dislocation-free deformation process in Al, Cu, and Ni thin foils. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 350, 17-24.	2.6	14
38	In situ TEM study on elastic interaction between a prismatic loop and a gliding dislocation. <i>Journal of Nuclear Materials</i> , 2012, 425, 54-59.	1.3	14
39	Effects of post-irradiation annealing and re-irradiation on microstructure in surveillance test specimens of the Loviisa-1 reactor studied by atom probe tomography and positron annihilation. <i>Journal of Nuclear Materials</i> , 2014, 449, 207-212.	1.3	14
40	Development of advanced expansion due to compression (A-EDC) test method for safety evaluation of degraded nuclear fuel cladding materials. <i>Journal of Nuclear Science and Technology</i> , 2015, 52, 1232-1239.	0.7	14
41	Surface orientation dependence of irradiation-induced hardening in a polycrystalline zirconium alloy. <i>Scripta Materialia</i> , 2019, 162, 209-213.	2.6	14
42	Vacancy effects on one-dimensional migration of interstitial clusters in iron under electron irradiation at low temperatures. <i>Philosophical Magazine</i> , 2016, 96, 2219-2242.	0.7	12
43	Tensile properties and microstructure of Zr-1.8Nb alloy subjected to 140-MeV C ⁴⁺ ion irradiation. <i>Journal of Nuclear Materials</i> , 2017, 495, 138-145.	1.3	12
44	Defect structure of gold introduced by high-speed deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 350, 70-75.	2.6	11
45	Transition of Deformation Mechanism with Grain Refinement in Interstitial-Free Steel. <i>ISIJ International</i> , 2014, 54, 1729-1734.	0.6	10
46	One-dimensional migration of interstitial clusters in SUS316L and its model alloys at elevated temperatures. <i>Philosophical Magazine</i> , 2015, 95, 1587-1606.	0.7	9
47	Nano-crystalline formation during stress-induced amorphization at crack tips in TiNi. <i>Journal of Electron Microscopy</i> , 1999, 48, 613-616.	0.9	8
48	Athermal migration of vacancies in iron and copper induced by electron irradiation. <i>Philosophical Magazine</i> , 2017, 97, 638-656.	0.7	8
49	Plastic deformation of bcc metal thin foils without dislocation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 350, 25-29.	2.6	7
50	Combining in situ transmission electron microscopy and molecular dynamics computer simulations to reveal the interaction mechanisms of dislocations with stacking-fault tetrahedron in nuclear materials. <i>Microscopy Research and Technique</i> , 2009, 72, 284-292.	1.2	7
51	Effects of molybdenum on microstructural evolution and mechanical properties in Zr-Nb alloys as nuclear fuel cladding materials. <i>Journal of Nuclear Science and Technology</i> , 2015, 52, 1265-1273.	0.7	6
52	A comparative study of hydride-induced embrittlement of Zircaloy-4 fuel cladding tubes in the longitudinal and hoop directions. <i>Journal of Nuclear Science and Technology</i> , 2017, 54, 490-499.	0.7	6
53	Mechanical Properties of Zircaloy-4 Cladding Tube by Advanced Expansion due to Compression (A-EDC) Test. <i>Materials Transactions</i> , 2017, 58, 46-51.	0.4	6
54	Plastic Deformation of Thin Metal Foils without Dislocations and Formation of Point Defects and Point Defect Clusters. <i>Materials Research Society Symposia Proceedings</i> , 2001, 673, 1.	0.1	5

#	ARTICLE	IF	CITATIONS
55	Simulation of transmission electron microscopy images during tensile fracture of metal foils. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 350, 207-215.	2.6	5
56	Effect of dislocation and grain boundary on deformation mechanism in ultrafine-grained interstitial-free steel. <i>IOP Conference Series: Materials Science and Engineering</i> , 2014, 63, 012125.	0.3	5
57	Crystallography of Precipitates in Metals and Alloys: (2) Impact of Crystallography on Precipitation Hardening. , 0, , .		5
58	Direct observation of solute-dislocation interaction on extended edge dislocation in irradiated austenitic stainless steel. <i>Philosophical Magazine Letters</i> , 2014, 94, 18-24.	0.5	4
59	Recrystallization behavior of a two-way cold rolled 12Cr ODS steel. <i>Fusion Engineering and Design</i> , 2019, 143, 99-105.	1.0	4
60	Temperature and Strain Rate Dependence of Deformation-Induced Point Defect Cluster Formation in Metal Thin Foils. <i>Materials Research Society Symposia Proceedings</i> , 2001, 673, 1.	0.1	2
61	Non-equilibrium local phase formation by high-speed deformation in NiTi. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 350, 145-149.	2.6	1
62	Consideration of the oxide particleâ€dislocation interaction in 9Cr-ODS steel. <i>Philosophical Magazine</i> , 2017, 97, 1047-1056.	0.7	1
63	Crystallography of Precipitates in Metals and Alloys: (1) Analysis of Crystallography. , 2019, , .		1
64	Crystallization Process of Amorphous Phase Produced by Ion Irradiation in TiNi Shape Memory Alloy. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1999, 63, 1218-1223.	0.2	1
65	One-dimensional Fast Diffusion of Vacancy Clusters. <i>Materia Japan</i> , 2008, 47, 600-600.	0.1	0
66	Deformation-induced Amorphization of Crack Tip in NiTi Alloy. <i>Materia Japan</i> , 1998, 37, 372-372.	0.1	0