

Yasuyoshi Nagai

List of Publications by Year in descending order

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230
papers

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citations

101543

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#	ARTICLE	IF	CITATIONS
1	Outstanding tensile properties of a precipitation-strengthened FeCoNiCrTi0.2 high-entropy alloy at room and cryogenic temperatures. <i>Acta Materialia</i> , 2019, 165, 228-240.	7.9	373
2	Irradiation-induced Cu aggregations in Fe: An origin of embrittlement of reactor pressure vessel steels. <i>Physical Review B</i> , 2001, 63, .	3.2	213
3	Positron confinement in ultrafine embedded particles: Quantum-dot-like state in an Fe-Cu alloy. <i>Physical Review B</i> , 2000, 61, 6574-6578.	3.2	191
4	Role of vacancy-solute complex in the initial rapid age hardening in an Al-Cu-Mg alloy. <i>Acta Materialia</i> , 2001, 49, 913-920.	7.9	161
5	Positron annihilation study of vacancy-type defects in high-speed deformed Ni, Cu and Fe. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 350, 95-101.	5.6	145
6	Positron annihilation study of vacancy-solute complex evolution in Fe-based alloys. <i>Physical Review B</i> , 2003, 67, .	3.2	129
7	Origins of positronium emitted from SiO ₂ . <i>Physical Review B</i> , 1998, 58, 12676-12679.	3.2	112
8	The effect of nanocrystallization and free volume on the room temperature plasticity of Zr-based bulk metallic glasses. <i>Acta Materialia</i> , 2008, 56, 5329-5339.	7.9	104
9	Direct evidence of positron trapping at polar groups in a polymer-blend system. <i>Physical Review B</i> , 1999, 60, 11863-11866.	3.2	98
10	Dopant distributions in n-MOSFET structure observed by atom probe tomography. <i>Ultramicroscopy</i> , 2009, 109, 1479-1484.	1.9	87
11	Nanostructural evolution in surveillance test specimens of a commercial nuclear reactor pressure vessel studied by three-dimensional atom probe and positron annihilation. <i>Acta Materialia</i> , 2007, 55, 6852-6860.	7.9	78
12	The two-step nucleation of G-phase in ferrite. <i>Acta Materialia</i> , 2016, 116, 104-113.	7.9	78
13	Effects of neutron-irradiation-induced intergranular phosphorus segregation and hardening on embrittlement in reactor pressure vessel steels. <i>Acta Materialia</i> , 2008, 56, 4510-4521.	7.9	70
14	Effects of chemical composition and dose on microstructure evolution and hardening of neutron-irradiated reactor pressure vessel steels. <i>Journal of Nuclear Materials</i> , 2010, 402, 93-101.	2.7	63
15	Nanostructural Evolution of Cr-rich Precipitates in a Cu-Cr-Zr Alloy During Heat Treatment Studied by 3 Dimensional Atom Probe. <i>Materials Transactions</i> , 2008, 49, 518-521.	1.2	61
16	Stable Vacancy Clusters in Neutron-Irradiated Graphite: Evidence for Aggregations with a Magic Number. <i>Physical Review Letters</i> , 1999, 82, 2532-2535.	7.8	59
17	Dopant distribution in gate electrode of n- and p-type metal-oxide-semiconductor field effect transistor by laser-assisted atom probe. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	56
18	3D-AP and positron annihilation study of precipitation behavior in Cu-Cr-Zr alloy. <i>Journal of Nuclear Materials</i> , 2009, 386-388, 852-855.	2.7	54

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19	Microstructural evolution of RPV steels under proton and ion irradiation studied by positron annihilation spectroscopy. <i>Journal of Nuclear Materials</i> , 2015, 458, 326-334.	2.7	54
20	Composition evolution of gamma prime nanoparticles in the Ti-doped CoFeCrNi high entropy alloy. <i>Scripta Materialia</i> , 2018, 148, 42-46.	5.2	54
21	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. <i>Acta Materialia</i> , 2016, 102, 323-332.	7.9	53
22	Density functional study on metastable bcc copper: Electronic structure and momentum density of positron-electron pairs. <i>Physical Review B</i> , 2002, 65, .	3.2	52
23	Irradiation-induced precipitates in a neutron irradiated 304 stainless steel studied by three-dimensional atom probe. <i>Journal of Nuclear Materials</i> , 2011, 418, 62-68.	2.7	52
24	Fermi Surface of Nanocrystalline Embedded Particles in Materials: bcc Cu in Fe. <i>Physical Review Letters</i> , 2001, 87, 176402.	7.8	47
25	Effect of neutron irradiation on rhenium cluster formation in tungsten and tungsten-rhenium alloys. <i>Journal of Nuclear Materials</i> , 2018, 507, 78-86.	2.7	47
26	Spin Polarization Dependent Far Infrared Absorption in Ga _{1-x} Mn _x As. <i>Japanese Journal of Applied Physics</i> , 2001, 40, 6231-6234.	1.5	46
27	Grain boundary segregation in neutron-irradiated 304 stainless steel studied by atom probe tomography. <i>Journal of Nuclear Materials</i> , 2012, 425, 71-75.	2.7	46
28	Behavior of phosphorous and contaminants from molecular doping combined with a conventional spike annealing method. <i>Nanoscale</i> , 2014, 6, 706-710.	5.6	45
29	Effects of thermal aging on microstructure and hardness of stainless steel weld-overlay claddings of nuclear reactor pressure vessels. <i>Journal of Nuclear Materials</i> , 2014, 452, 235-240.	2.7	43
30	Microstructural changes of a thermally aged stainless steel submerged arc weld overlay cladding of nuclear reactor pressure vessels. <i>Journal of Nuclear Materials</i> , 2012, 425, 60-64.	2.7	41
31	Fabrication of GaN/Diamond Heterointerface and Interfacial Chemical Bonding State for Highly Efficient Device Design. <i>Advanced Materials</i> , 2021, 33, e2104564.	21.0	41
32	Positron and positronium studies of irradiation-induced defects and microvoids in vitreous metamict silica. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000, 166-167, 431-439.	1.4	39
33	Interlaboratory comparison of positron annihilation lifetime measurements for synthetic fused silica and polycarbonate. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	39
34	Origin of characteristic variability in metal-oxide-semiconductor field-effect transistors revealed by three-dimensional atom imaging. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	39
35	Coincidence Doppler broadening and 3DAP study of the pre-precipitation stage of an Al–Li–Cu–Mg–Ag alloy. <i>Acta Materialia</i> , 2004, 52, 1997-2003.	7.9	38
36	Hardening and microstructural evolution in A533B steels under high-dose electron irradiation. <i>Journal of Nuclear Materials</i> , 2005, 340, 247-258.	2.7	38

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37	Study on microstructural changes in thermally-aged stainless steel weld-overlay cladding of nuclear reactor pressure vessels by atom probe tomography. <i>Journal of Nuclear Materials</i> , 2011, 415, 198-204.	2.7	37
38	Depth and lateral resolution of laser-assisted atom probe microscopy of silicon revealed by isotopic heterostructures. <i>Journal of Applied Physics</i> , 2011, 109, 036102.	2.5	37
39	Positron annihilation characterization of nanostructured ferritic alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 518, 150-157.	5.6	35
40	Contribution of irradiation-induced defects to hardening of a low-copper reactor pressure vessel steel. <i>Acta Materialia</i> , 2018, 155, 402-409.	7.9	35
41	Deformation-enhanced Cu precipitation in Fe-Cu alloy studied by positron annihilation spectroscopy. <i>Physical Review B</i> , 2001, 65, .	3.2	34
42	Atom Probe Tomography Interlaboratory Study on Clustering Analysis in Experimental Data Using the Maximum Separation Distance Approach. <i>Microscopy and Microanalysis</i> , 2019, 25, 356-366.	0.4	32
43	Hysteresis in phase transitions at clean and Au-covered Si(111) surfaces. <i>Physical Review B</i> , 1993, 47, 9903-9906.	3.2	30
44	Chemical analysis of precipitates in metallic alloys using coincidence Doppler broadening of positron annihilation radiation. <i>Radiation Physics and Chemistry</i> , 2000, 58, 737-742.	2.8	30
45	First-principles calculation of coincidence Doppler broadening of positron annihilation radiation. <i>Physical Review B</i> , 2002, 65, .	3.2	30
46	In situ TEM observation of dislocation movement through the ultrafine obstacles in an Fe alloy. <i>Journal of Nuclear Materials</i> , 2002, 307-311, 946-950.	2.7	29
47	Monolayer segregation of As atoms at the interface between gate oxide and Si substrate in a metal-oxide-semiconductor field effect transistor by three-dimensional atom-probe technique. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	29
48	Microstructural changes in a Russian-type reactor weld material after neutron irradiation, post-irradiation annealing and re-irradiation studied by atom probe tomography and positron annihilation spectroscopy. <i>Acta Materialia</i> , 2013, 61, 5236-5246.	7.9	29
49	Three-dimensional evaluation of gettering ability of $\{111\}$ grain boundaries in silicon by atom probe tomography combined with transmission electron microscopy. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	28
50	Kinetics of irradiation-induced Cu precipitation in nuclear reactor pressure vessel steels. <i>Applied Physics Letters</i> , 2005, 87, 261920.	3.3	27
51	Atomic scale modeling of $\{110\}$ twist grain boundaries in $\hat{\epsilon}$ -iron: Structure and energy properties. <i>Philosophical Magazine</i> , 2010, 90, 991-1000.	1.6	27
52	Deuterium trapping at vacancy clusters in electron/neutron-irradiated tungsten studied by positron annihilation spectroscopy. <i>Journal of Nuclear Materials</i> , 2018, 499, 464-470.	2.7	27
53	Interlaboratory Comparison of Positron Annihilation Lifetime Measurements. <i>Materials Science Forum</i> , 0, 607, 248-250.	0.3	26
54	Positronium in silica-based glasses. <i>Radiation Physics and Chemistry</i> , 2003, 68, 569-572.	2.8	25

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55	The effect of twist angle on anisotropic mobility of {1 1 0} hexagonal dislocation networks in $\hat{\epsilon}$ -iron. <i>Scripta Materialia</i> , 2012, 66, 761-764.	5.2	25
56	Positron Annihilation in Cardo-Based Polymer Membranes. <i>Journal of Physical Chemistry B</i> , 2014, 118, 6007-6014.	2.6	25
57	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.	2.7	25
58	Positronium formation in a polymer blend of polyethylene and chlorinated polyethylene. <i>Physical Review B</i> , 2001, 63, .	3.2	24
59	Post-irradiation annealing behavior of microstructure and hardening of a reactor pressure vessel steel studied by positron annihilation and atom probe tomography. <i>Journal of Nuclear Materials</i> , 2012, 425, 65-70.	2.7	24
60	Recombination activity of nickel, copper, and oxygen atoms segregating at grain boundaries in mono-like silicon crystals. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	24
61	Intense positron beam at KEK. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000, 171, 164-171.	1.4	23
62	Correlation between threshold voltage and channel dopant concentration in negative-type metal-oxide-semiconductor field-effect transistors studied by atom probe tomography. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	23
63	Impact of carbon coimplantation on boron behavior in silicon: Carbon $\hat{\epsilon}$ boron coclustering and suppression of boron diffusion. <i>Applied Physics Letters</i> , 2011, 98, 232101.	3.3	22
64	Positron lifetime and coincidence Doppler broadening study of vacancy-oxygen complexes in Si: experiments and first-principles calculations. <i>Applied Surface Science</i> , 2002, 194, 76-83.	6.1	21
65	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, .	3.2	21
66	Phosphorus and boron diffusion paths in polycrystalline silicon gate of a trench-type three-dimensional metal-oxide-semiconductor field effect transistor investigated by atom probe tomography. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	21
67	Influence of laser power on atom probe tomographic analysis of boron distribution in silicon. <i>Ultramicroscopy</i> , 2017, 173, 58-63.	1.9	21
68	Three dimensional characterization of dopant distribution in polycrystalline silicon by laser-assisted atom probe. <i>Applied Physics Letters</i> , 2008, 93, 133507.	3.3	20
69	Chemical bonding at room temperature via surface activation to fabricate low-resistance GaAs/Si heterointerfaces. <i>Applied Surface Science</i> , 2020, 525, 146610.	6.1	20
70	Temperature dependence of the momentum distribution of positronium in MgF ₂ , SiO ₂ , and H ₂ O. <i>Physical Review B</i> , 2000, 62, 5531-5535.	3.2	19
71	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.	2.7	19
72	Nanosopic mechanism of Cu precipitation at small-angle tilt boundaries in Si. <i>Physical Review B</i> , 2015, 91, .	3.2	18

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73	Lifetime of delocalized positronium in SiO_2 . <i>Physical Review B</i> , 1999, 60, 7677-7679.	3.2	17
74	Dopant characterization in self-regulatory plasma doped fin field-effect transistors by atom probe tomography. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	17
75	Three-Dimensional Characterization of Deuterium Implanted in Silicon Using Atom Probe Tomography. <i>Applied Physics Express</i> , 2013, 6, 066602.	2.4	17
76	Development of a mono-energetic positron beam line at the Kyoto University Research Reactor. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2015, 342, 104-107.	1.4	17
77	Impact of local atomic stress on oxygen segregation at tilt boundaries in silicon. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	17
78	Irradiation-induced vacancy and Cu aggregations in Fe-Cu model alloys of reactor pressure vessel steels: state-of-the-art positron annihilation spectroscopy. <i>Philosophical Magazine</i> , 2005, 85, 467-478.	1.6	16
79	Digital positron lifetime spectrometer for measurements of radioactive materials. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 568, 716-722.	1.6	16
80	The diffusivity and solubility of copper in ferromagnetic iron at lower temperatures studied by atom probe tomography. <i>Scripta Materialia</i> , 2014, 83, 5-8.	5.2	16
81	Fabrication of high-quality GaAs/diamond heterointerface for thermal management applications. <i>Diamond and Related Materials</i> , 2021, 111, 108207.	3.9	16
82	Measurement of positron spin polarization by using the Doppler broadening method. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000, 171, 199-203.	1.4	15
83	Elemental analysis of positron affinitive site in materials by coincidence Doppler broadening spectroscopy. <i>Radiation Physics and Chemistry</i> , 2003, 68, 381-386.	2.8	15
84	Quenched-in vacancies in a Ti-Nb-Sn alloy studied by positron lifetime spectroscopy. <i>Scripta Materialia</i> , 2006, 54, 1751-1753.	5.2	15
85	Quantization of the Frank-Bilby equation for misfit dislocation arrays in interfaces. <i>Acta Materialia</i> , 2009, 57, 4874-4881.	7.9	15
86	Hardening and microstructural evolution in A533B steels under neutron irradiation and a direct comparison with electron irradiation. <i>Journal of Nuclear Materials</i> , 2010, 400, 46-55.	2.7	15
87	Atomic-scale characterization of germanium isotopic multilayers by atom probe tomography. <i>Journal of Applied Physics</i> , 2013, 113, 026101.	2.5	15
88	Microstructural analysis of impurity segregation around Nb precipitates in Zr-Nb alloy using positron annihilation spectroscopy and atom probe tomography. <i>Scripta Materialia</i> , 2015, 108, 156-159.	5.2	15
89	Impact of carbon co-implantation on boron distribution and activation in silicon studied by atom probe tomography and spreading resistance measurements. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 026501.	1.5	15
90	Identification of Vacancy-Oxygen Complexes in Si by Coincidence Doppler Broadening of Positron Annihilation Radiation and First-Principles Calculations. <i>Materials Science Forum</i> , 2001, 363-365, 67-69.	0.3	14

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91	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.	2.7	14
92	Three-dimensional evaluation of gettering ability for oxygen atoms at small-angle tilt boundaries in Czochralski-grown silicon crystals. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	14
93	Evolution of shape, size, and areal density of a single plane of Si nanocrystals embedded in SiO ₂ matrix studied by atom probe tomography. <i>RSC Advances</i> , 2016, 6, 3617-3622.	3.6	14
94	Roles of Solute C and Grain Boundary in Strain Aging Behaviour of Fine-grained Ultra-low Carbon Steel Sheets. <i>ISIJ International</i> , 2017, 57, 1273-1281.	1.4	14
95	Effects of neutron flux on irradiation-induced hardening and defects in RPV steels studied by positron annihilation spectroscopy. <i>Journal of Nuclear Materials</i> , 2020, 532, 152041.	2.7	14
96	Grain-boundary phosphorus segregation in highly neutron-irradiated reactor pressure vessel steels and its effect on irradiation embrittlement. <i>Journal of Nuclear Materials</i> , 2021, 543, 152564.	2.7	14
97	Amorphous silicon structure of heat-treated poly(n-propylsilylene) studied by far-infrared spectroscopy. <i>Chemical Physics Letters</i> , 1993, 207, 132-136.	2.6	13
98	A new two-dimensional angular correlation of annihilation radiation apparatus using position-sensitive photomultiplier tubes. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1996, 378, 629-632.	1.6	13
99	Three-Dimensional Elemental Analysis of Commercial 45 nm Node Device with High- k /Metal Gate Stack by Atom Probe Tomography. <i>Applied Physics Express</i> , 2011, 4, 116601.	2.4	13
100	Size estimation of embedded Cu nanoprecipitates in Fe by using affinitively trapped positrons. <i>Physical Review B</i> , 2012, 86, .	3.2	13
101	Hardening in thermally-aged Fe-Cr binary alloys: Statistical parameters of atomistic configuration. <i>Acta Materialia</i> , 2015, 89, 116-122.	7.9	13
102	Quantitative analysis of hydrogen in SiO ₂ /SiN/SiO ₂ stacks using atom probe tomography. <i>AIP Advances</i> , 2016, 6, .	1.3	13
103	Nanoscopic analysis of oxygen segregation at tilt boundaries in silicon ingots using atom probe tomography combined with TEM and <i>ab initio</i> calculations. <i>Journal of Microscopy</i> , 2017, 268, 230-238.	1.8	13
104	Characterization of Nanoscopic Cu/Diamond Interfaces Prepared by Surface-Activated Bonding: Implications for Thermal Management. <i>ACS Applied Nano Materials</i> , 2020, 3, 2455-2462.	5.0	13
105	Room temperature direct bonding of diamond and InGaP in atmospheric air. <i>Functional Diamond</i> , 2021, 1, 110-116.	3.8	13
106	Recovery features of kink boundaries upon post-annealing of a hot-extruded Mg-Zn-Y alloy. <i>Materials Characterization</i> , 2021, 177, 111153.	4.4	13
107	Position sensitive scintillation detector for $\hat{\gamma}$ -rays using a GSO crystal. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 349, 285-288.	1.6	12
108	Identification of ultra-fine Ti-rich precipitates in V-Cr-Ti alloys irradiated below 300°C by using positron CDB technique. <i>Journal of Nuclear Materials</i> , 2008, 373, 289-294.	2.7	12

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109	Channel Dopant Distribution in Metal-Oxide-Semiconductor Field-Effect Transistors Analyzed by Laser-Assisted Atom Probe Tomography. Applied Physics Express, 2011, 4, 036601.	2.4	12
110	Radiation-hardening and nano-cluster formation in neutron-irradiated 9Cr 2W low activation steels with different Si contents. Journal of Nuclear Materials, 2019, 517, 1-8.	2.7	12
111	In-situ WB-STEM observation of dislocation loop behavior in reactor pressure vessel steel during post-irradiation annealing. Materialia, 2020, 12, 100778.	2.7	12
112	Diffusionless isothermal omega transformation in titanium alloys driven by quenched-in compositional fluctuations. Physical Review Materials, 2019, 3, .	2.4	12
113	Time evolution of positron affinity trapping at embedded nanoparticles by age-momentum correlation. Physical Review B, 2011, 83, .	3.2	11
114	Three-Dimensional Dopant Characterization of Actual Metal-Oxide-Semiconductor Devices of 65 nm Node by Atom Probe Tomography. Applied Physics Express, 2013, 6, 046502.	2.4	11
115	Boron distributions in individual core-shell Ge/Si and Si/Ge heterostructured nanowires. Nanoscale, 2016, 8, 19811-19815.	5.6	11
116	154Er ³⁺ photoluminescence from Er:O _x centers at extremely low concentration in silicon at 300ÅK. Optics Letters, 2017, 42, 3311.	3.3	11
117	Fabrication of diamond/Cu direct bonding interface for power device applications. Japanese Journal of Applied Physics, 2020, 59, SBBB03.	1.5	11
118	Structural phase transitions at clean and metal-covered Si(111) surfaces investigated by RHEED spot analysis. Phase Transitions, 1995, 53, 87-114.	1.3	10
119	Micropattern of Inorganic Film Prepared by UV-Irradiation and Heat Treatment of Polyalkylsilyne Film. Japanese Journal of Applied Physics, 1995, 34, L452-L454.	1.5	10
120	X-ray diffraction study of[Zn(1-propyltetrazole) ₆](BF ₄) ₂ single crystal. Physical Review B, 1998, 58, 14098-14101.	3.2	10
121	Local structural deformation in[Zn(1-propyltetrazole) ₆](BF ₄) ₂ and[Fe(1-propyltetrazole) ₆](BF ₄) ₂ crystals observed by positron-annihilation spectroscopy. Physical Review B, 1998, 57, 14119-14122.	3.2	10
122	Short and medium range order in two-component silica glasses by positron annihilation spectroscopy. Journal of Applied Physics, 2014, 115, .	2.5	10
123	Weak-beam scanning transmission electron microscopy for quantitative dislocation density measurement in steels. Microscopy (Oxford, England), 2017, 66, 120-130.	1.5	10
124	Impact of focused ion beam on structural and compositional analysis of interfaces fabricated by surface activated bonding. Japanese Journal of Applied Physics, 2020, 59, SBBB05.	1.5	10
125	Surface Scattering in Inelastic Scattering. https://arxiv.org/abs/1908.09888 $\text{Co} \times \text{Mn}$	3.8	10
126	Analysis of Momentum Distribution of Bloch-Positronium in Solids. Materials Science Forum, 1997, 255-257, 596-598.	0.3	9

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127	Temperature-activated transition of positronium from self-trapped to delocalized state in CaF_2 . <i>Physical Review B</i> , 2007, 76, .	3.2	9
128	Size-dependent momentum smearing effect of positron annihilation radiation in embedded nano Cu clusters. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 445203.	1.8	9
129	Microstructural changes of oxide dispersion strengthened copper powders fabricated by mechanical alloying. <i>Fusion Engineering and Design</i> , 2021, 173, 112804.	1.9	9
130	Fabrication of $\text{Ga}_2\text{O}_3/\text{Si}$ heterointerface and characterization of interfacial structures for high-power device applications. <i>Japanese Journal of Applied Physics</i> , 2022, 61, SF1001.	1.5	9
131	Time-of-Flight Spectroscopy of Positronium Emission from SiO_2 Surface. <i>Materials Science Forum</i> , 1997, 255-257, 689-691.	0.3	8
132	Direct observation of the temperature variation of the short positron lifetime in metals by using the positron age-momentum correlation technique. <i>Physical Review B</i> , 1999, 60, R9893-R9895.	3.2	8
133	A position-sensitive scintillation detector for two-dimensional angular correlation of annihilation radiation using metal-package position-sensitive photomultiplier tubes. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1999, 423, 364-368.	1.6	8
134	Vacancy formation energy for indium determined by a positron annihilation technique. <i>Physical Review B</i> , 2001, 63, .	3.2	8
135	Jahn-Teller distortion of neutral divacancy in Si studied by positron annihilation spectroscopy. <i>Physica B: Condensed Matter</i> , 2003, 340-342, 518-522.	2.7	8
136	Self-Energy Correction to Momentum-Density Distribution of Positron-Electron Pairs. <i>Physical Review Letters</i> , 2005, 94, 106402.	7.8	8
137	Positronium in a SrF_2 single crystal: Temperature-induced transition from the localized to the delocalized state. <i>Physical Review B</i> , 2005, 71, .	3.2	8
138	Interactions between Fermi surfaces and Brillouin zone boundaries and phase stability of embedded metallic nanoparticles. <i>Physical Review B</i> , 2009, 79, .	3.2	8
139	Intergranular Segregation in the Pressure Vessel Steel of a Commercial Nuclear Reactor Studied by Atom Probe Tomography. <i>Materials Transactions</i> , 2013, 54, 2119-2124.	1.2	8
140	Role of W and Mn for reliable 1X nanometer-node ultra-large-scale integration Cu interconnects proved by atom probe tomography. <i>Applied Physics Letters</i> , 2014, 105, 133512.	3.3	8
141	Defect characterization, mechanical and thermal property evaluation in CVD-W after low-dose neutron irradiation. <i>International Journal of Refractory Metals and Hard Materials</i> , 2019, 85, 105004.	3.8	8
142	Atomistic modeling of hardening in spinodally-decomposed Fe-Cr binary alloys. <i>Journal of Nuclear Materials</i> , 2020, 540, 152306.	2.7	8
143	Can a newly developed AMOC technique be applied to determine the para-positronium lifetime?. <i>Radiation Physics and Chemistry</i> , 2000, 58, 777-780.	2.8	7
144	Nonpolar optical scattering of positronium in magnesium fluoride. <i>Physical Review B</i> , 2005, 72, .	3.2	7

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145	Digital positron lifetime spectrometer for measurements of radioactive materials. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 4001-4003.	0.8	7
146	Irradiation-induced changes of the atomic distributions around the interfaces of carbides in a nuclear reactor pressure vessel steel. <i>Journal of Nuclear Materials</i> , 2010, 405, 177-180.	2.7	7
147	A crystallographic model of fcc/bcc martensitic nucleation and growth. <i>Acta Materialia</i> , 2010, 58, 1599-1606.	7.9	7
148	Positron annihilation study of the Mg-Zn-Y alloys with long period stacking ordered (LPSO) structures. <i>Journal of Physics: Conference Series</i> , 2013, 443, 012029.	0.4	7
149	Positron beam facility at Kyoto University Research Reactor. <i>Journal of Physics: Conference Series</i> , 2014, 505, 012030.	0.4	7
150	Correlative atom probe tomography and scanning transmission electron microscopy reveal growth sequence of LPSO phase in Mg alloy containing Al and Gd. <i>Scientific Reports</i> , 2021, 11, 3073.	3.3	7
151	Origin of recombination activity of non-coherent $\{111\}$ grain boundaries with a positive deviation in the tilt angle in cast-grown silicon ingots. <i>Applied Physics Express</i> , 2021, 14, 011002.	2.4	7
152	Positronium Contact Density in Crystalline and Amorphous SiO ₂ . <i>Materials Science Forum</i> , 2001, 363-365, 567-569.	0.3	6
153	Vacancy-Solute Binding Energies in Aluminum by Positron Annihilation. <i>Materials Science Forum</i> , 2004, 445-446, 165-167.	0.3	6
154	Use of the Frank-Bilby equation for calculating misfit dislocation arrays in interfaces. <i>Scripta Materialia</i> , 2010, 62, 458-461.	5.2	6
155	Effect of electron- and neutron-irradiation on Fe-Cu model alloys studied by positron annihilation spectroscopy. <i>Journal of Physics: Conference Series</i> , 2011, 265, 012007.	0.4	6
156	Positron annihilation study for enhanced nitrogen-vacancy center formation in diamond by electron irradiation at 77 K. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	6
157	Hole size distributions in cardo-based polymer membranes deduced from the lifetimes of ortho-positronium. <i>Journal of Physics: Conference Series</i> , 2016, 674, 012017.	0.4	6
158	Insight into segregation sites for oxygen impurities at grain boundaries in silicon. <i>Applied Physics Express</i> , 2021, 14, 041003.	2.4	6
159	Positron Annihilation in [Fe(ptz) ₆](BF ₄) ₂ and [Zn(ptz) ₆](BF ₄) ₂ Single Crystals Studied with One-Dimensional Angular Correlation of Annihilation Radiation. <i>Japanese Journal of Applied Physics</i> , 1998, 37, 111-112.	1.5	5
160	Positron Annihilation Study of Microvoids in Neutron-Irradiated Vanadium: Effects of Oxygen Impurities. <i>Materials Science Forum</i> , 2001, 363-365, 167-169.	0.3	5
161	Irradiation-Enhanced Cu-Precipitation in Fe-Cu Alloys Studied by Positron Annihilation Spectroscopy and Electrical Resistivity Measurement. <i>Materials Science Forum</i> , 2004, 445-446, 168-170.	0.3	5
162	Neutron Irradiated Copper: Is the Main Positron Lifetime Component due to Stacking Fault Tetrahedra?. <i>Materials Science Forum</i> , 2004, 445-446, 21-25.	0.3	5

#	ARTICLE	IF	CITATIONS
163	Shape deformation by moving a glissile interface with one set of misfit dislocations. Philosophical Magazine Letters, 2009, 89, 605-613.	1.2	5
164	Oxidation-enhanced Si self-diffusion in isotopically modulated silicon nanopillars. Journal of Applied Physics, 2020, 127, 045704.	2.5	5
165	Effect of refraction index and thickness of the light guide in the position-sensitive gamma-ray detector using compact PS-PMTs. Radiation Physics and Chemistry, 2000, 58, 763-766.	2.8	4
166	Study of Ultrafine Cu Precipitates in Neutron-Irradiated Fe Utilizing Positron Quantum-Dot-Like States. Materials Science Forum, 2001, 363-365, 91-93.	0.3	4
167	Quadrupole interaction of positronium in α -quartz. Physical Review B, 2003, 67, .	3.2	4
168	Search for Positron Trapping at Quantum-Dot Like Cu Nano Particles on the Surface of Fe Using Positron Annihilation induced Auger Electron Spectroscopy (PAES). Materials Science Forum, 2004, 445-446, 156-158.	0.3	4
169	Embedded Ultrafine Clusters Investigated by Coincidence Doppler Broadening Spectroscopy. Materials Science Forum, 2004, 445-446, 11-15.	0.3	4
170	Elemental Distribution in Multilayer Systems by Laser-Assisted Atom Probe Tomography with Various Analysis Directions. Microscopy and Microanalysis, 2015, 21, 1373-1378.	0.4	4
171	Evaluation of spatial and temporal resolution on in situ annealing aberration-corrected transmission electron microscopy with proportional integral differential controller. Microscopy (Oxford,) Tj ETQq1 1 0.7843.54 rgBT /Overlock		
172	Multiscale characterization of the joint bonded by Cu@Ag core@shell nanoparticles. Applied Physics Letters, 2020, 116, .	3.3	4
173	Synthesis and Properties of Silicon-Branched Organosilicon Polymers. Advances in Chemistry Series, 1989, , 505-513.	0.6	3
174	A position-sensitive γ -ray detector for positron annihilation 2D-ACAR based on metal package photomultiplier tubes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 487, 471-476.	1.6	3
175	Structural Subnanovoids in Silica-Based Glasses Probed by Positronium. Materials Science Forum, 2004, 445-446, 304-306.	0.3	3
176	Irradiation-Induced Defects and Cu Precipitates in Ternary Fe-Based Model Alloys for Nuclear Reactor Pressure Vessel Steels Studied by Positron Annihilation and 3D Atom Probe. Materials Science Forum, 2004, 445-446, 195-197.	0.3	3
177	Electronic Structure of Nanosized bcc Cu Precipitates in Fe-Cu Alloys Studied by Positron 2D-ACAR. Materials Science Forum, 2004, 445-446, 380-384.	0.3	3
178	Reaction kinetic analysis of reactor surveillance data. Nuclear Instruments & Methods in Physics Research B, 2015, 352, 125-129.	1.4	3
179	Suppression of segregation of the phosphorus δ -doping layer in germanium by incorporation of carbon. Japanese Journal of Applied Physics, 2016, 55, 031304.	1.5	3
180	Atom probe tomographic assessment of the distribution of germanium atoms implanted in a silicon matrix through nano-apertures. Nanotechnology, 2017, 28, 385301.	2.6	3

#	ARTICLE	IF	CITATIONS
181	Atom probe study of erbium and oxygen co-implanted silicon. , 2017, , .		3
182	Effect of carbon on boron diffusion and clustering in silicon: Temperature dependence study. Journal of Applied Physics, 2018, 124, 155702.	2.5	3
183	Influence of gas environment and heating on atomic structures of platinum nanoparticle catalysts for proton-exchange membrane fuel cells. Nanotechnology, 2019, 30, 175701.	2.6	3
184	Experimental inspection of a computationally-designed NiCrMnSi Heusler alloy with high Curie temperature. Japanese Journal of Applied Physics, 2020, 59, 073003.	1.5	3
185	Segregation mechanism of arsenic dopants at grain boundaries in silicon. Science and Technology of Advanced Materials Methods, 2021, 1, 169-180.	1.3	3
186	Investigation of Cu Diffusivity in Fe by a Combination of Atom Probe Experiments and Kinetic Monte Carlo Simulation. Materials Transactions, 2021, 62, 929-934.	1.2	3
187	Heavy-ion irradiation and post-irradiation annealing effects in explosion-welded CuCrZr/316LN joints for ITER application. Materials Characterization, 2021, 178, 111252.	4.4	3
188	The role of silicon on solute clustering and embrittlement in highly neutron-irradiated pressurized water reactor surveillance test specimens. Journal of Nuclear Materials, 2021, 556, 153203.	2.7	3
189	A New Method for Size Estimation of Cu Nano-precipitates in Fe Based on Positron Quantum-dot Confinement. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2009, 95, 118-123.	0.4	3
190	AlGaN/GaN/3C-SiC on diamond HEMTs with thick nitride layers prepared by bonding-first process. Applied Physics Express, 2022, 15, 041003.	2.4	3
191	Variation in atomistic structure due to annealing at diamond/silicon heterointerfaces fabricated by surface activated bonding. Japanese Journal of Applied Physics, 2022, 61, SF1006.	1.5	3
192	The Effect of the Spin-Crossover on the ACAR Spectra through the Ortho-Para Conversion of Positronium. Materials Science Forum, 1995, 175-178, 765-767.	0.3	2
193	Use of a Newly Developed Compact 2D-ACAR Spectrometer for the Study of Positronium in Solids. Materials Science Forum, 1997, 255-257, 488-490.	0.3	2
194	Magic Number Vacancy Clusters in Graphite and Silicon. Materials Science Forum, 2001, 363-365, 132-134.	0.3	2
195	Search for the Positronium Quadrupole Interaction in Molecular Crystals. Materials Science Forum, 2004, 445-446, 410-412.	0.3	2
196	Resolution deconvolution method applied to 2D-ACAR measurements. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 3993-3996.	0.8	2
197	Reaction of positronium with doped ions in silica-based glasses in the size determination of subnanometer structural open spaces. Journal of Applied Physics, 2013, 114, 154904.	2.5	2
198	Diffusivity and Solubility of Cu in a Reactor Pressure Vessel Steel Studied by Atom Probe Tomography. Materials Transactions, 2015, 56, 1513-1516.	1.2	2

#	ARTICLE	IF	CITATIONS
217	Study of Delocalized Positronium in Alkali Halides by 2D-ACAR. Materials Science Forum, 1997, 255-257, 569-571.	0.3	0
218	Two-dimensional angular correlation study of delocalized positronium in alkali halides. Journal of Physics Condensed Matter, 1997, 9, 11239-11246.	1.8	0
219	Age-momentum correlation study of positronium, fine particle surface and monovacancy formation energy. Radiation Physics and Chemistry, 2000, 58, 767-769.	2.8	0
220	Vacancy Formation Energy of Metals Determined by Using Positron Age-Momentum Correlation Technique. Materials Science Forum, 2001, 363-365, 185-188.	0.3	0
221	POSITRON ANNIHILATION STUDY FOR ELECTRONIC STRUCTURE OF CU PRECIPITATES IN DILUTE FE-CU ALLOYS. , 2003, , .		0
222	3DAP Observation of Precipitates in Cu-Cr-Zr Alloy Heat Sink Material for the Divertor. Materia Japan, 2008, 47, 634-634.	0.1	0
223	Diffusivity and Solubility of Cu in a Reactor Pressure Vessel Steel Studied by Atom Probe Tomography. Materials Transactions, 2014, 55, 1460-1463.	1.2	0
224	Roles of Solute C and Grain Boundary in Strain Aging Behaviour of Fine-grained Ultra-low Carbon Steel Sheets. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2019, 105, 452-461.	0.4	0
225	Atom probe tomography of GaAs homointerfaces fabricated by surface-activated bonding. , 2019, , .		0
226	Elemental Distribution Analysis of Semiconductor Nanostructures with Atom Probe Tomography. Journal of the Vacuum Society of Japan, 2013, 56, 340-347.	0.3	0
227	Development of Niobium Bearing High Carbon Steel Sheet for Knitting Needles. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2019, 105, 76-85.	0.4	0
228	Artifacts in the structural analysis of SAB-fabricated interfaces by using focused ion beam. , 2019, , .		0
229	On the Use of Density-Based Algorithms for the Analysis of Solute Clustering in Atom Probe Tomography Data. Minerals, Metals and Materials Series, 2018, , 881-897.	0.4	0
230	Structural analysis of diamond/silicon heterointerfaces fabricated by surface activated bonding at room temperature. , 2021, , .		0