

Yasumasa Tanishiro

List of Publications by Year in descending order

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121
papers

5,604
citations

136950

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docs citations

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times ranked

1824
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural analysis of Si(111)- $\sqrt{7} \times \sqrt{7}$ by UHV transmission electron diffraction and microscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1985, 3, 1502-1506.	2.1	1,275
2	Structure analysis of Si(111)- $\sqrt{7} \times \sqrt{7}$ reconstructed surface by transmission electron diffraction. Surface Science, 1985, 164, 367-392.	1.9	1,104
3	Direct observation of the phase transition between the ($\sqrt{7} \times \sqrt{7}$) and (1×1) structures of clean (111) silicon surfaces. Surface Science, 1981, 109, 353-366.	1.9	298
4	Reflection electron microscopy of clean and gold deposited (111) silicon surfaces. Surface Science, 1980, 97, 393-408.	1.9	252
5	STEM imaging of 47-pm-separated atomic columns by a spherical aberration-corrected electron microscope with a 300-kV cold field emission gun. Journal of Electron Microscopy, 2009, 58, 357-361.	0.9	147
6	UHV transmission electron microscopy on the reconstructed surface of (111) gold. Surface Science, 1981, 111, 395-413.	1.9	126
7	Transmission electron microscope study of the reconstructed Au(001) surface. Surface Science, 1988, 199, 595-608.	1.9	83
8	Measurement method of aberration from Ronchigram by autocorrelation function. Ultramicroscopy, 2008, 108, 1467-1475.	1.9	78
9	On the phase transition between the ($\sqrt{7} \times \sqrt{7}$) and (1×1) structures of silicon (111) surface studied by reflection electron microscopy. Ultramicroscopy, 1983, 11, 95-102.	1.9	77
10	Direct imaging of lithium atoms in LiV ₂ O ₄ by spherical aberration-corrected electron microscopy. Microscopy (Oxford, England), 2010, 59, 457-461.	1.5	76
11	Surface Structures Observed by High-Resolution UHV Electron Microscopy at Atomic Level. Japanese Journal of Applied Physics, 1987, 26, L957-L960.	1.5	71
12	Surface study by an UHV electron microscope. Surface Science, 1979, 86, 174-181.	1.9	69
13	Dynamic observation of gold adsorption on Si(111)- $\sqrt{7} \times \sqrt{7}$ surface by high-resolution reflection electron microscopy. Ultramicroscopy, 1989, 31, 20-28.	1.9	66
14	Reflection electron microscope study of the initial stages of oxidation of Si(111)- $\sqrt{7} \times \sqrt{7}$ surfaces. Ultramicroscopy, 1985, 18, 453-461.	1.9	65
15	Achieving 63 pm Resolution in Scanning Transmission Electron Microscope with Spherical Aberration Corrector. Japanese Journal of Applied Physics, 2007, 46, L568-L570.	1.5	62
16	Electron energy loss spectriscopy in glancing reflection from bulk crystals. Ultramicroscopy, 1983, 11, 215-222.	1.9	60
17	Dimer-chain model for the $\sqrt{7} \times \sqrt{7}$ and the $2\sqrt{2} \times \sqrt{2}$ reconstructed surfaces of reconstructed surfaces of Si(111) and Ge(111). Physical Review B, 1986, 34, 1034-1040.	3.2	56
18	UHV-REM Study of Changes in the Step Structures on Clean (100) Silicon Surfaces by Annealing. Japanese Journal of Applied Physics, 1987, 26, L293-L295.	1.5	53

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19	Biatomic Layer-High Steps on Si(001)2 $\sqrt{3}$ –1 Surface. Japanese Journal of Applied Physics, 1987, 26, L280-L282.	1.5	47
20	On the vacancy formation and diffusion on the Si(111)7 $\sqrt{3}$ –7 surfaces under exposures of low oxygen pressure studied by in situ reflection electron microscopy. Surface Science, 1987, 191, 28-44.	1.9	46
21	Direct-current-induced drift direction of silicon adatoms on Si(111)-(1 $\sqrt{3}$ –1) surfaces. Surface Science, 2000, 461, L528-L536.	1.9	44
22	Direct Current Heating Induced Giant Step Bunching and Wandering on Si(111) and (001) Vicinal Surfaces. Japanese Journal of Applied Physics, 1999, 38, L308-L311.	1.5	43
23	Gold adsorption processes on Si(111)7 $\sqrt{3}$ – 7 studied by in-situ reflection electron microscopy. Surface Science, 1990, 234, 37-42.	1.9	42
24	Design and development of an ultrahigh vacuum high-resolution transmission electron microscope. Ultramicroscopy, 1991, 35, 111-118.	1.9	42
25	On the stability and structure of 5 $\sqrt{3}$ –5 and 7 $\sqrt{3}$ –7 reconstruction of the (111) surface of Si and Ge. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1986, 4, 1074.	1.6	40
26	ATOMIC STRUCTURE OF THE In ON Si(111)(4 $\sqrt{3}$ – 1) SURFACE. Surface Review and Letters, 1997, 04, 65-70.	1.1	40
27	Short range orders of an adsorbed layer: gold on the Si(111)7 $\sqrt{3}$ – 7 surface. Surface Science, 1991, 242, 73-80.	1.9	39
28	In-situ UHV electron microscope study of metal-silicon surfaces. Applied Surface Science, 1990, 41-42, 337-341.	6.1	38
29	Reconstructions and phase transitions of Ge on the Si(111)7 $\sqrt{3}$ – 7 surface. Surface Science, 1989, 222, 38-46.	1.9	37
30	UHV electron microscope and diffraction analyses of the structure formed by Pd ON Si(111)7 $\sqrt{3}$ – 7. Surface Science, 1988, 205, 177-186.	1.9	35
31	REM observations of Si(hhk) surfaces and their vicinal surfaces. Surface Science, 1993, 298, 473-477.	1.9	34
32	Counting lithium ions in the diffusion channel of an LiV2O4 crystal. Journal of Applied Physics, 2011, 109, .	2.5	34
33	Monolayer and Bilayer High Steps on Si(001)2 $\sqrt{3}$ –1 Vicinal Surface. Japanese Journal of Applied Physics, 1987, 26, L1186-L1188.	1.5	33
34	UHV-TEM study on the reconstructed surface of Au(111): Metastable p $\sqrt{3}$ – p $\sqrt{3}$ and stable p $\sqrt{3}$ – 1 surface structure. Surface Science, 1988, 205, 637-651.	1.9	33
35	REM study of high index Si(5 5 12) flat surfaces. Surface Science, 1996, 348, 335-343.	1.9	30
36	Quantitative annular dark-field STEM images of a silicon crystal using a large-angle convergent electron probe with a 300-kV cold field-emission gun. Journal of Electron Microscopy, 2011, 60, 109-116.	0.9	30

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37	UHV-TEM-REM Studies of Si(111) Surfaces. Progress of Theoretical Physics Supplement, 1991, 106, 303-314.	0.1	30
38	Reconstructions and phase transitions of Ge on the Si(111)7 \times 7 surface. Surface Science, 1989, 222, 47-63.	1.9	29
39	Electromigration and gold-induced step bunching on the Si(111) surface. Surface Science, 1998, 401, 22-33.	1.9	29
40	In situ electron microscope study of the initial stage of metal growth on metals. Thin Solid Films, 1985, 126, 95-105.	1.8	28
41	Dynamical Step Edge Stiffness on the Si(111) Surface. Physical Review Letters, 1996, 76, 94-97.	7.8	28
42	Validity of the kinematical approximation in transmission electron diffraction for the analysis of surface structures. Ultramicroscopy, 1989, 27, 1-8.	1.9	27
43	Dynamic observation of In adsorption on Si(111) surfaces by UHV high-temperature scanning tunneling microscopy. Surface Science, 1996, 357-358, 407-413.	1.9	27
44	Improvement of resolution by convergent-beam illumination in surface profile images of high resolution transmission electron microscopy. Ultramicroscopy, 1990, 33, 255-260.	1.9	26
45	Commensurate reconstruction on a (001) facet of a gold particle. Physical Review B, 1990, 42, 7238-7241.	3.2	24
46	REM and TEM studies of 2D Au _{1-x} Cu alloy adsorbates on a Si(111) surface. Surface Science, 1991, 242, 81-89.	1.9	24
47	Detection of arsenic dopant atoms in a silicon crystal using a spherical aberration corrected scanning transmission electron microscope. Physical Review B, 2010, 81, .	3.2	24
48	Growth of Si on Au deposited Si(111) surfaces studied by UHV-REM. Applied Surface Science, 1992, 60-61, 107-111.	6.1	23
49	Au adsorption induced faceting and phase transitions of facet planes on the Si[110] zone studied by UHV-REM. Surface Science, 1998, 408, 101-111.	1.9	23
50	Au adsorption on Si(5512) surfaces and facet formation studied by high resolution in situ REM. Surface Science, 2001, 493, 508-518.	1.9	22
51	Controlled polarity of sputter-deposited aluminum nitride on metals observed by aberration corrected scanning transmission electron microscopy. Journal of Applied Physics, 2013, 113, .	2.5	22
52	A New Technique to Produce Clean and Thin Silicon Films In Situ in a UHV Electron Microscope for TEM-TED Studies of Surfaces. Japanese Journal of Applied Physics, 1990, 29, L655-L658.	1.5	20
53	Heterogrowth of Ge on the Si(001)2 \times 1 reconstructed surface. Surface Science, 1992, 273, 9-20.	1.9	20
54	Growth of Si on Si(111)-In surfaces studied by UHV-REM. Surface Science, 1993, 287-288, 915-920.	1.9	20

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55	In-situ study of gold-induced surface structures and step rearrangements on the Si(001) surface by high-temperature STM. <i>Surface Science</i> , 1998, 407, L657-L664.	1.9	20
56	REM Studies of Adsorption-Induced Phase Transitions and Faceting in the Si(111)-Au System. <i>Surface Review and Letters</i> , 1998, 05, 653-663.	1.1	19
57	New Phase Diagram of Step Instabilities on Si(111) Vicinal Surfaces Induced by DC Annealing. <i>Journal of the Physical Society of Japan</i> , 2001, 70, 1026-1034.	1.6	18
58	Growth mechanism of $7\sqrt{3}\times 7$ domains from the $\sqrt{3}\times\sqrt{3}$ phase on a quenched Si(111) surface studied by high-temperature STM. <i>Surface Science</i> , 1999, 423, L236-L243.	1.9	17
59	STM studies of Si(5 5 12) $2\sqrt{3}\times 1$ surfaces. <i>Surface Science</i> , 1996, 357-358, 522-526.	1.9	16
60	Adatom effective charge in morphology evolution on Si(111) surface. <i>Applied Surface Science</i> , 1998, 130-132, 60-66.	6.1	15
61	In situ reflection electron microscopy study of Cu-induced step bunching on Si(111) vicinal surfaces. <i>Surface Science</i> , 1999, 438, 68-75.	1.9	13
62	A Dopant Cluster in a Highly Antimony Doped Silicon Crystal. <i>Applied Physics Express</i> , 2010, 3, 081301.	2.4	12
63	Reflection electron microscope study of Pt(111) surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1987, 5, 1735-1738.	2.1	11
64	Dynamic observation of oxygen-induced step movement on the Si (111) $7\sqrt{3}\times 7$ surface by high-resolution reflection electron microscopy. <i>Surface Science</i> , 1992, 275, 26-30.	1.9	11
65	REM studies of the roughening transitions of Si high index surfaces. <i>Thin Solid Films</i> , 1999, 343-344, 423-426.	1.8	11
66	In-situ REM study of Au-induced faceting on Si(113) surface. <i>Surface Science</i> , 1999, 438, 91-96.	1.9	11
67	Time evolution of DC heating-induced in-phase step wandering on Si(111) vicinal surfaces. <i>Surface Science</i> , 2001, 493, 487-493.	1.9	11
68	High resolution REM studies of Si(5 5 12) surfaces and their roughening phase transition. <i>Surface Science</i> , 2001, 493, 499-507.	1.9	11
69	UHV-REM study of homoepitaxial growth of Si. <i>Journal of Crystal Growth</i> , 1991, 115, 359-364.	1.5	10
70	REM study of surface electromigration of Ge, AuCu and Ag on Si(111) surfaces. <i>Applied Surface Science</i> , 1992, 60-61, 79-84.	6.1	10
71	REM studies of Ge growth on Au-adsorbed Si(001) surfaces. <i>Surface Science</i> , 1995, 331-333, 913-919.	1.9	10
72	STM studies of Si(hhm) surface with. <i>Surface Science</i> , 1996, 357-358, 73-77.	1.9	10

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73	DC-HEATING-INDUCED ANTIBAND FORMATION AND SUBSEQUENT STEP WANDERING ON Si(111) STUDIED BY IN-SITU REM. Surface Review and Letters, 1999, 06, 977-984.	1.1	10
74	In situ studies of fast atom bombardment and annealing processes by reflection electron microscopy. Nuclear Instruments & Methods in Physics Research B, 1988, 33, 474-478.	1.4	9
75	Ultra High Vacuum Reflection Electron Microscopy Study of Step-Dislocation Interaction on Si(111) Surface. Japanese Journal of Applied Physics, 1995, 34, 5768-5773.	1.5	9
76	In situ TEM observations of surfactant-mediated epitaxy: growth of Ge on an Si(111) surface mediated by In. Surface Science, 1996, 357-358, 418-421.	1.9	9
77	Quantitative studies of step bunching dynamics on Si(111) induced by a current effect. Surface Science, 1996, 357-358, 518-521.	1.9	9
78	Competing effects of current and strain on step structures on Si(001)2 Å ⁻¹ studied by REM. Surface Science, 1997, 382, 310-319.	1.9	9
79	TED Study of Si(113) Surfaces. Surface Review and Letters, 1998, 05, 249-254.	1.1	9
80	Cu induced step bunching on a Si(111) vicinal surface studied by reflection electron microscopy. Surface Science, 1999, 433-435, 512-516.	1.9	9
81	Scanning tunneling microscopy studies on the reversible phase transition between metastable structures of Si(111)-c2Å ⁻⁸ and 1Å ⁻¹ . Surface Science, 1999, 441, 179-191.	1.9	9
82	DC heating-induced step instability on Si(001) vicinal surfaces. Surface Science, 1999, 442, L1006-L1012.	1.9	9
83	Study on probe current dependence of the intensity distribution in annular dark field images. Ultramicroscopy, 2012, 121, 38-41.	1.9	9
84	High-resolution electron microscope observation of atomic bridge formation between two interacting gold particles. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 153-154.	2.1	8
85	GROWTH OF Ge ON In-ADSORBED Si(111) SURFACES STUDIED BY UHV-REM. Surface Review and Letters, 1995, 02, 1-8.	1.1	8
86	Reversible phase transition between metastable structures of Si(111)c2Å ⁻⁸ and 1Å ⁻¹ studied by high-temperature STM. Surface Science, 1998, 411, L822-L827.	1.9	8
87	Electron microscopy at a sub-50 pm resolution. Microscopy (Oxford, England), 2011, 60, S239-S244.	1.5	8
88	Image Conservation in Inelastically Scattered Electrons in Reflection Electron Microscopy. Japanese Journal of Applied Physics, 1999, 38, 6540-6543.	1.5	7
89	Growth of monoatomic layer terraces on a (111) lead crystal face: In situ observations in dark field by UHV-TEM. Surface Science, 1985, 155, 53-64.	1.9	6
90	Temperature dependence of period of step wandering formed on Si(111) vicinal surfaces by DC heating. Journal of Physics Condensed Matter, 1999, 11, L551-L556.	1.8	6

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91	Electron Energy Loss Spectroscopy in REM-RHEED: Energy Filtering by Omega-type Energy Filter.. Hyomen Kagaku, 2003, 24, 166-173.	0.0	6
92	TEM study of Si(111) surfaces. Applied Surface Science, 1992, 60-61, 367-371.	6.1	5
93	PEEM and REM studies of surface dynamics: electromigration and Cl adsorption and desorption. Surface Science, 1996, 357-358, 820-824.	1.9	5
94	UHV REM investigation of the interaction between steps and dislocation on silicon (111) surface II. Surface Science, 1996, 357-358, 550-554.	1.9	5
95	In-situ Annular Bright-Field Imaging of Structural Transformation of Spinel Li_2O Crystals into Defective $\text{Li}_x\text{V}_2\text{O}_4$. Japanese Journal of Applied Physics, 2012, 51, 020202.	1.5	5
96	Determination of aberration center of Ronchigram for automated aberration correctors in scanning transmission electron microscopy. Ultramicroscopy, 2013, 135, 71-79.	1.9	5
97	Studies of surface stress by reflection electron microscopy and transmission electron microscopy. Surface Science, 1996, 357-358, 576-580.	1.9	4
98	Formation of anomalously wide Si(111) 3\AA -3 clean surface and its stability. Surface Science, 2001, 493, 157-165.	1.9	4
99	Single- and triple-height-step distributions on Si(111) vicinal surfaces inclined toward [111] studied by reflection electron microscopy. Surface Science, 2002, 496, 179-186.	1.9	4
100	REM STUDIES OF STEP CREATION ENERGIES AND STEP-STEP INTERACTIONS ON Si(111) AND (110) VICINAL SURFACES. Surface Review and Letters, 1999, 06, 985-994.	1.1	3
101	TED analysis of the Si(113) surface structure. Surface Science, 1999, 438, 76-82.	1.9	3
102	Energy-filtered Electron Interferometry in Reflection Electron Microscopy. Japanese Journal of Applied Physics, 2001, 40, 2527-2532.	1.5	3
103	Electron Energy Loss Spectroscopy of Graphene Identified by Aberration, Corrected TEM at 300kV. Microscopy and Microanalysis, 2009, 15, 1484-1485.	0.4	3
104	Highly Stable 300kV Cold Field Emission Gun for 50pm Resolution Electron Microscopy. Microscopy and Microanalysis, 2009, 15, 1084-1085.	0.4	2
105	Element discrimination in a hexagonal boron nitride nanosheet by aberration corrected transmission electron microscopy. Ultramicroscopy, 2012, 122, 6-11.	1.9	2
106	Rem and Rheed Studies of Pb Adsorption on Si(111). Materials Research Society Symposia Proceedings, 1992, 280, 109.	0.1	1
107	Rem and Rheed Studies of Pb Adsorption on Si(111). Materials Research Society Symposia Proceedings, 1992, 295, 261.	0.1	1
108	Rem and Tem Studies of Thin Film Growth Dynamics on si Surfaces. Materials Research Society Symposia Proceedings, 1995, 404, 131.	0.1	1

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109	Development of Domestic Spherical Aberration Correction Electron Microscope, R005. Journal of the Vacuum Society of Japan, 2008, 51, 714-718.	0.3	1
110	Adatom on Graphene, Directly Imaged by Aberration Corrected TEM at 300kV. Microscopy and Microanalysis, 2009, 15, 1476-1477.	0.4	1
111	Surface Imaging by ABF-STEM: Lithium Ions in Diffusion Channel of LIB Electrode Materials. E-Journal of Surface Science and Nanotechnology, 2012, 10, 454-458.	0.4	1
112	Current Effects and Surface Morphology on Si Vicinal Surfaces.. Hyomen Kagaku, 1999, 20, 830-836.	0.0	1
113	In-Situ Observation of Au/TiO ₂ Catalyst in Oxygen-Gas Environments. Microscopy and Microanalysis, 2009, 15, 692-693.	0.4	0
114	Detection of Arsenic Dopant Atoms in Silicon Crystal by Aberration Corrected Scanning Transmission Electron Microscope. Microscopy and Microanalysis, 2009, 15, 1488-1489.	0.4	0
115	Electron Microscopy for $\hat{\text{Nano-in-Macro}}$. Hyomen Kagaku, 2013, 34, 226-233.	0.0	0
116	Nanocycles of Materials' Transport studied by <i>in-situ</i> Electron Microscopy and Diffraction. Journal of Physics: Conference Series, 2014, 522, 012005.	0.4	0
117	A Silver Fine Wire Grown from an Ionic Conductor, AgI, and its Electric Conductance. Shinku/Journal of the Vacuum Society of Japan, 2003, 46, 298-301.	0.2	0
118	Structural Analysis at an Atomic Scale Using Spherical Aberration Corrected Electron Microscope. Nihon Kessho Gakkaishi, 2012, 54, 159-165.	0.0	0
119	<i>In-situ</i> Annular Bright-Field Imaging of Structural Transformation of Spinel LiV ₂ O ₄ Crystals into Defective Li _x V ₂ O ₄ . Japanese Journal of Applied Physics, 2012, 51, 020202.	1.5	0
120	UHV-TEM-REM Studies of Si(111) Surfaces. Progress of Theoretical Physics Supplement, 2013, 106, 303-314.	0.1	0
121	MICROSCOPY : A MEANS TO STUDY SURFACE STRUCTURES. Journal De Physique Colloque, 1987, 48, C6-525-C6-530.	0.2	0