

Hiroshi Tochihara

List of Publications by Year in descending order

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63
papers

1,293
citations

394286

19
h-index

377752

34
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63
all docs

63
docs citations

63
times ranked

810
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-temperature scanning-tunneling-microscopy observations of the Si(001) surface with a low surface-defect density. Physical Review B, 1994, 50, 12262-12265.	1.1	117
2	Rotational Epitaxy of Chemisorbed K Monolayers on Cu(001). Physical Review Letters, 1984, 52, 1794-1797.	2.9	80
3	Structure and transitions of K monolayers on Cu (001). Surface Science, 1985, 158, 490-496.	0.8	78
4	Structural and electronic properties of thallium overlayers on the Si(111)- $\sqrt{7}\times\sqrt{7}$ surface. Physical Review B, 2002, 66, .	1.1	67
5	Observation of anomalous LEED patterns from Li adsorbed Cu(001): $2\sqrt{3}\times\sqrt{3}$ and $4\sqrt{3}\times\sqrt{3}$. Surface Science, 1992, 279, 89-98.	0.8	66
6	Epitaxial Silicon Oxynitride Layer on a $6\sqrt{3}\times\sqrt{3}$ SiC(0001) Surface. Physical Review Letters, 2007, 98, 136105.	2.9	57
7	Composite surface structures formed by restructuring-type adsorption of alkali-metals on fcc metals. Progress in Surface Science, 1998, 58, 1-74.	3.8	56
8	The initial process of molecular beam epitaxial growth of Si on Si(111)- $\sqrt{7}\times\sqrt{7}$: a model for the destruction of the $\sqrt{7}\times\sqrt{7}$ reconstruction. Surface Science, 1993, 296, 186-198.	0.8	55
9	Step-structure dependent step-flow: models for the homoepitaxial growth at the atomic steps on Si(111)- $\sqrt{7}\times\sqrt{7}$. Surface Science, 1994, 311, 107-125.	0.8	50
10	Completion of the structural determination of and rationalization of the surface-structure sequence $(2\sqrt{3}\times\sqrt{3})\rightarrow(3\sqrt{3}\times\sqrt{3})\rightarrow(4\sqrt{3}\times\sqrt{3})$ formed on Cu(001) with increasing Li coverage. Physical Review B, 1995, 52, R11658-R11661.	1.1	45
11	Tl Adsorption of Tl Atoms in a Si(111)- $(1\sqrt{3}\times\sqrt{3})$ -Tl Structure, Determined by Low-Energy Electron Diffraction Analysis. Japanese Journal of Applied Physics, 2003, 42, L319-L321.	0.8	44
12	Fabrication of a single layer graphene by copper intercalation on a SiC(0001) surface. Applied Physics Letters, 2014, 104, .	1.5	41
13	Determination of the $c(2\sqrt{3}\times\sqrt{3})$ structure formed on Cu(001) upon Li adsorption: a low-energy electron diffraction analysis. Surface Science, 1993, 293, 239-245.	0.8	35
14	Complex surface alloy formed by Li deposition on Cu(001) determined by dynamical low-energy electron diffraction. Physical Review B, 1995, 51, 1969-1972.	1.1	34
15	Structure determination of Si(001)- $c(4\sqrt{3}\times\sqrt{3})$ surfaces at 80K and electron beam effect below 40K studied by low-energy electron diffraction. Physical Review B, 2004, 69, .	1.1	28
16	Reactive epitaxial growth of MnSi ultrathin films on Si(111) by Mn deposition. Physical Review B, 2009, 79, .	1.1	27
17	Structural analysis of the $c(4\sqrt{3}\times\sqrt{3})$ reconstruction in Si(001) and Ge(001) surfaces by low-energy electron diffraction. Surface Science, 2006, 600, 815-819.	0.8	26
18	Surface structure of Cu(001)- $c(2\sqrt{3}\times\sqrt{3})$ -Mg: a tensor low energy electron diffraction analysis and a first-principles calculation. Surface Science, 2000, 470, 53-61.	0.8	25

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19	Electron-Beam-Induced Disorder of the Si(001) $\sqrt{3} \times \sqrt{3}$ Surface Structure. <i>Physical Review Letters</i> , 2005, 94, 195502.	2.9	21
20	The epitaxial crystalline silicon-oxynitride layer on SiC(0001): Formation of an ideal SiC-insulator interface. <i>Progress in Surface Science</i> , 2011, 86, 295-327.	3.8	20
21	In situ Scanning Tunneling Microscopy Observation of the Unreconstructed Region in a Quenched Si(111) Surface: Dynamic Size-Conversion of the Stacking-Faulted Half of the DAS Structure. <i>Journal of the Physical Society of Japan</i> , 1998, 67, 1513-1516.	0.7	19
22	Neutralization of an epitaxial graphene grown on a SiC(0001) by means of palladium intercalation. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	19
23	Transformations of faulted halves of the DAS structure on quenched Si(111). <i>Surface Science</i> , 1999, 423, L291-L298.	0.8	18
24	Missing-row-type restructuring of the Cu(001) surface induced by Li adsorption: a low-energy electron diffraction analysis. <i>Surface Science</i> , 1993, 292, L811-L816.	0.8	16
25	Theoretical Study of Cu Intercalation through a Defect in Zero-Layer Graphene on SiC Surface. <i>Journal of Physical Chemistry C</i> , 2017, 121, 7294-7302.	1.5	16
26	Ordered mixed surface structures formed on Cu(001) by coadsorption of dissimilar metals: (2×2) $\sqrt{3}$ by Mg and Li, and ($\sqrt{5} \times \sqrt{5}$) $\sqrt{3}$ by Mg and K(Cs). <i>Surface Science</i> , 2001, 486, L480-L488.	0.8	15
27	Epitaxially grown flat MnSi ultrathin film on Si(111). <i>Applied Physics Letters</i> , 2008, 93, .	1.5	14
28	Comment on "Step structure of vicinal Ge(001) surfaces" by B.A.G. Kersten, H.J.W. Zandvliet, D.H.A. Blank and A. van Silfhout. <i>Surface Science</i> , 1995, 340, 328-332.	0.8	12
29	Stable surface termination on vicinal SiC(0001) surfaces. <i>Surface Science</i> , 2009, 603, 566-570.	0.8	12
30	Dynamic observation of Si-island growth on a Si(111)- 7×7 surface by high-temperature scanning tunneling microscopy. <i>Journal of Crystal Growth</i> , 1996, 166, 314-318.	0.7	10
31	Formation mechanism of the Si(111)- 7×7 reconstruction studied by scanning tunneling microscopy: Zipper-like restructuring in the sequential size changes of isolated single faulted-halves. <i>Surface Science</i> , 2003, 526, 219-229.	0.8	10
32	Reversible electromigration of thallium adatoms on the Si(111) surface. <i>Surface Science</i> , 2006, 600, 189-193.	0.8	10
33	AN ORDERED MIXED STRUCTURE FORMED BY RESTRUCTURING TYPE COADSORPTION OF Na AND K ON Ag(001). <i>Surface Review and Letters</i> , 2001, 08, 653-659.	0.5	9
34	Scanning Tunneling Microscopy Observation of the Formation of the Smallest Dimer-Adatom Stacking-fault Domain on a Quenched Si(111) Surface. <i>Japanese Journal of Applied Physics</i> , 2000, 39, 4408-4411.	0.8	8
35	Determination of a (2×2) $\sqrt{3}$ $\sqrt{3}$ structure formed by coadsorption of Li and Mg on a Cu(001) surface. <i>Surface Science</i> , 2001, 493, 91-98.	0.8	8
36	Formation processes of an ordered mixed structure: Cu(-)- $\sqrt{3} \times \sqrt{3}$ -Li, Mg. <i>Surface Science</i> , 2002, 514, 194-199.	0.8	8

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37	Surface structures formed by individual adsorption and coadsorption of Mn and Bi on Cu(001), studied by LEED. Surface Science, 2006, 600, 591-597.	0.8	8
38	Atomic and valence-band electronic structures of the epitaxial SiON layer on the SiC(0001): X-ray diffraction and angle-resolved photoemission spectroscopy investigations. Surface Science, 2011, 605, 328-332.	0.8	8
39	Microscopic mechanism of the homoepitaxy on $\langle 111 \rangle$ Si surface. Physical Review B, 2016, 94, .		
40	DOMAIN GROWTH OF THE DAS STRUCTURE ON A QUENCHED Si(111) SURFACE STUDIED BY STM. Surface Review and Letters, 1999, 06, 995-1001.	0.5	7
41	An ordered surface alloy formed by attractive interaction between coadsorbates: $c(2\sqrt{2})$ on Cu(001) by Mg and Bi. Surface Science, 2003, 530, L307-L312.	0.8	7
42	An ordered surface ternary alloy of a $c(6\sqrt{3})$ structure formed on Cu(001) by substitutional coadsorption of Mg and Bi. Surface Science, 2003, 538, L488-L494.	0.8	6
43	Structure of the $\sqrt{3}\times\sqrt{3}$ phase at 0.5 monolayer coverage. Physical Review B, 2005, 71, .	1.1	6
44	Adsorption of PTCDA on Si(001) $\sqrt{2}\times\sqrt{2}$ surface. Journal of Chemical Physics, 2015, 142, 101904.	1.2	6
45	Phase diagrams of simple metals on fcc(001) metal surfaces: an application to Mg on Cu. Surface Science, 2001, 493, 106-113.	0.8	5
46	Determination of $\sqrt{2}\times\sqrt{2}$ structures formed on Cu(001) by coadsorption of Bi and K(Cs): on-top site adsorption of K(Cs). Surface Science, 2003, 536, L415-L422.	0.8	5
47	Ordered mixed surface structures formed by coadsorption of dissimilar metal atoms on Cu(001). Vacuum, 2004, 74, 121-131.	1.6	5
48	Asymmetric adsorption-site of potassium atoms in the $\sqrt{3}\times\sqrt{3}$ structure formed on Cu(001). Surface Science, 2007, 601, 5162-5169.	0.8	5
49	Scanning tunneling microscopic and spectroscopic studies on a crystalline silica monolayer epitaxially formed on hexagonal SiC(0001) surfaces. Applied Physics Letters, 2014, 104, 051601.	1.5	5
50	Stabilization mechanism of Si(111) $\sqrt{7}\times\sqrt{7}$ domain growth: important role of shared corner-holes. Surface Science, 2001, 491, L663-L669.	0.8	4
51	Equivalent ordered-mixed-surface-structures of $p(4\times 4)$ formed on Cu(001) by coadsorptions of Bi+Mg and Sb+Mg. Surface Science, 2005, 588, 167-174.	0.8	4
52	Surface alloy model of $p(2\sqrt{2})$ Sb/Cu(001) from LEED I/V data. Surface Science, 2008, 602, 2473-2477.	0.8	4
53	Ground state of the $\langle 111 \rangle$ Si surface and its electron-beam-induced disordering. Physical Review B, 2010, 81, .		
54	Self-ordering of chemisorbed PTCDA molecules on Ge(001) driven by repulsive forces. Physical Chemistry Chemical Physics, 2019, 21, 9504-9511.	1.3	4

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55	In situ observation of initial homoepitaxial growth on the Si(111) $7\sqrt{3}\times\sqrt{3}$ surface using scanning tunnelling microscopy. <i>Journal of Crystal Growth</i> , 2002, 237-239, 35-38.	0.7	3
56	Initial growth of pentacene on a Si(111)-In surface. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 14748-14755.	1.3	3
57	Origin of arc shape of LEED streaks on Li adsorbed on Cu(001) surface at lower coverage. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 5057-5067.	0.7	2
58	Structure determination of the Cu(001)-c(4 $\sqrt{3}\times\sqrt{3}$)-Sn surface by low-energy electron diffraction. <i>Surface Science</i> , 2010, 604, 535-540.	0.8	2
59	Microscopic Hopping Mechanism of an Isolated PTCDA Molecule on a Reactive Ge(001) Surface. <i>Journal of Physical Chemistry C</i> , 2020, 124, 24704-24712.	1.5	2
60	Hydrogen etching of the SiC(0001) surface at moderate temperature. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2021, 39, .	0.6	2
61	Determination of a (4 $\sqrt{3}\times\sqrt{3}$) structure formed on a Cu(001) surface by adsorption of calcium. <i>Surface Science</i> , 2009, 603, 659-663.	0.8	1
62	Anomalous structural evolution and $3\sqrt{3}\times\sqrt{3}$ reconstruction of a clean Si(111) surface observed after thermal desorption of thallium. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015, 33, 021408.	0.9	1
63	Structural Modification of Si(001)-c(4*2) Induced by Electron Beam at Low Temperatures. <i>Hyomen Kagaku</i> , 2005, 26, 480-485.	0.0	0