

Lutz Hammer

List of Publications by Year in descending order

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3,808
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101496

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125
all docs

125
docs citations

125
times ranked

2682
citing authors

#	ARTICLE	IF	CITATIONS
1	Epitaxial Cobalt Oxide Films with Wurtzite Structure on Au(111). <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100383.	1.2	2
2	Submonolayer copper telluride phase on Cu(111): Ad-chain and trough formation. <i>Physical Review B</i> , 2021, 104, .	1.1	4
3	CuTe chains on Cu(111) by deposition of one-third of a monolayer of Te: Atomic and electronic structure. <i>Physical Review B</i> , 2020, 102, .	1.1	5
4	Orbital-Driven Rashba Effect in a Binary Honeycomb Monolayer AgTe. <i>Physical Review Letters</i> , 2020, 124, 176401.	2.9	33
5	Surface structure and stacking of the commensurate $(13\sqrt{3}\times 13)R13.9^\circ$ charge density wave phase of $1T\sqrt{3}\text{-TaS}_2(0001)$. <i>Physical Review B</i> , 2019, 100, .	1.1	14
6	Adsorption and Intermolecular Interaction of Cobalt Phthalocyanine on CoO(111) Ultrathin Films: An STM and DFT Study. <i>Journal of Physical Chemistry C</i> , 2017, 121, 2889-2895.	1.5	10
7	Monatomic Co, $\langle \text{http://www.w3.org/1998/Math/MathML} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi mathvariant="bold"} \rangle \text{CoO} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$, and $\langle \text{http://www.w3.org/1998/Math/MathML} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi mathvariant="bold"} \rangle \text{CoO} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$ nanowires on $\text{Ir}(100)$ and $\text{Pt}(100)$ surfaces: Formation, structure, and energetics. <i>Physical Review B</i> , 2017, 96, .	1.1	6
8	Crystallographic structure and energetics of the $\text{Rh}(1\sqrt{3}\times 1)\text{-}2\text{O}$ phase. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 365001.	0.7	0
9	Adsorption of hydrogen on stable and metastable Ir(100) surfaces. <i>Surface Science</i> , 2017, 656, 66-76.	0.8	9
10	Structure and ordering of oxygen on unreconstructed Ir(100). <i>Physical Review B</i> , 2016, 93, .	1.1	19
11	Self-Organized Growth, Structure, and Magnetism of Monatomic Transition-Metal Oxide Chains. <i>Physical Review Letters</i> , 2016, 117, 046101.	2.9	32
12	Evidence for On-Site Carboxylation in the Self-Assembly of 4,4'-Biphenyl Dicarboxylic Acid on Cu(111). <i>Journal of Physical Chemistry C</i> , 2016, 120, 1043-1048.	1.5	25
13	Adsorption and Activation of CO on $\text{Co}_3\text{O}_4(111)$ Thin Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 16688-16699.	1.5	72
14	Thermal evolution of cobalt deposits on $\text{Co}_3\text{O}_4(111)$: atomically dispersed cobalt, two-dimensional CoO islands, and metallic Co nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23538-23546.	1.3	19
15	Subsurface cation vacancy stabilization of the magnetite (001) surface. <i>Science</i> , 2014, 346, 1215-1218.	6.0	222
16	Epitaxial cobalt oxide films on Ir(100)—the importance of crystallographic analyses. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 173001.	0.7	65
17	Tuning the Growth Orientation of Epitaxial Films by Interface Chemistry. <i>Physical Review Letters</i> , 2012, 108, 066101.	2.9	27
18	Incommensurate Moiré overlayer with strong local binding: CoO(111) bilayer on Ir(100). <i>Physical Review B</i> , 2012, 86, .	1.1	17

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19	Laterally nanostructured cobalt oxide films on Ir(100). Physical Review B, 2012, 85, .	1.1	2
20	Structural elements in the oxidation process of a single cobalt layer on Ir(100)- $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \text{stretchy="false"} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \text{Å} \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$ Tj ETQq 0 0 14 rgBT /Ov	1.1	14
21	Substrate-induced structural modulation of a CoO(111) bilayer on Ir(100). Physical Review B, 2010, 81, .	1.1	29
22	Growth of metal nanowires of tunable width. Physical Review B, 2010, 81, .	1.1	2
23	Ligand Effect in Hydrogen Adsorption on Epitaxial Nickel Films. Zeitschrift Fur Physikalische Chemie, 2009, 223, 75-88.	1.4	3
24	Superstructure in the termination of CoO(111) surfaces: Low-energy electron diffraction and scanning tunneling microscopy. Physical Review B, 2009, 79, .	1.1	33
25	Substoichiometric cobalt oxide monolayer on Ir(100)-(1 Å ⁻¹). Journal of Physics Condensed Matter, 2009, 21, 474211.	0.7	12
26	Point defects in the NiAl(100) surface. Journal of Physics Condensed Matter, 2009, 21, 134007.	0.7	1
27	A route to continuous ultra-thin cerium oxide films on Cu(1 1 1). Surface Science, 2009, 603, 3382-3388.	0.8	67
28	Nanostructure formation on Ir(100). Progress in Surface Science, 2009, 84, 2-17.	3.8	20
29	Phases and phase transitions of hexagonal cobalt oxide films on Ir(100)-(1 Å ⁻¹). Journal of Physics Condensed Matter, 2009, 21, 185003.	0.7	49
30	In honour of Professor Klaus Heinz. Journal of Physics Condensed Matter, 2009, 21, 130301.	0.7	0
31	Surface structure of polar Co ₃ O ₄ (111) films grown epitaxially on Ir(100)-(1 Å ⁻¹) Tj ETQq 1 1 0.784314 rgBT 96	0.7	14
32	Coexistence of Rocksalt and Wurtzite Structure in Nanosized CoO Films. Physical Review Letters, 2008, 101, 016103.	2.9	69
33	The power of joint application of LEED and DFT in quantitative surface structure determination. Journal of Physics Condensed Matter, 2008, 20, 304204.	0.7	5
34	Strain relief through stair-rod dislocations in ultrathin epitaxial metal films: Defect geometry and energetics. Physical Review B, 2008, 78, .	1.1	7
35	Transition metal superlattices and epitaxial films on $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{Ir} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 100 \langle \text{mml:mn} \rangle$ Physical Review B, 2008, 78, .	1.1	13
36	Adsorbate cluster expansion for an arbitrary number of inequivalent sites. Physical Review B, 2008, 78, .	1.1	39

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37	Pseudomorphic growth of Fe monolayers on Ir(100) surface. Physical Review B, 2007, 76, .	1.1	30
38	Spontaneous symmetry breaking of the Ir(100) (5Å-1) hex surface induced by hydrogen adsorption. Physical Review B, 2006, 74, .	1.1	13
39	Ultrathin cobalt oxide films on Ir(100) (1Å-1). Physical Review B, 2006, 74, .	1.1	43
40	Unusual adsorption site of hydrogen on the unreconstructed Ir(100) surface. Physical Review B, 2006, 73, .	1.1	67
41	Complex adsorbate-substrate interplay of H on Ir(100) (5Å-1)-hex: Density functional calculations. Physical Review B, 2006, 74, .	1.1	10
42	Role of Co antisite segregation in the CoAl(111) surface. Physical Review B, 2005, 71, .	1.1	14
43	Reversible H-Induced Switching of the Magnetic Easy Axis in Ni/Cu(001) Thin Films. Physical Review Letters, 2004, 93, 247203.	2.9	71
44	(3Å-1)-Br/Pt(110) structure and the charge-density-wave-assisted c(2Å-2) to (3Å-1) phase transition. Physical Review B, 2004, 69, .	1.1	23
45	First-Principles-Based Surface Phase Diagram of Fully Relaxed Binary Alloy Surfaces. Physical Review Letters, 2004, 92, 195503.	2.9	24
46	Fe/Cu(100) as a test case for the understanding of epitaxially grown magnetic thin films. Surface Science, 2004, 569, 1-3.	0.8	16
47	Nanowire formation without surface steps. Applied Surface Science, 2004, 237, 520-528.	3.1	8
48	Combined Application of LEED and STM in Surface Crystallography. Journal of Physical Chemistry B, 2004, 108, 14579-14584.	1.2	12
49	Lateral nanoscale Fe-Ir superlattices on Ir(100). Europhysics Letters, 2004, 65, 830-836.	0.7	19
50	Hydrogen-Induced and Defect-Mediated Structural Transition (5Å-1)-hex to (5Å-1)-H on Ir(100). Zeitschrift Fur Physikalische Chemie, 2004, 218, 997-1010.	1.4	4
51	Homogeneous surface iron silicide formation on Si(111): The c(8Å-4) phase. Physical Review B, 2003, 68, .	1.1	37
52	Submonolayer iron film growth on reconstructed Ir(100) (5Å-1). Physical Review B, 2003, 67, .	1.1	32
53	Hydrogen-Induced Self-Organized Nanostructuring of the Ir(100) Surface. Physical Review Letters, 2003, 91, 156101.	2.9	42
54	Competitive surface segregation of C, Al and S impurities in Fe(100). Journal of Physics Condensed Matter, 2003, 15, 3517-3529.	0.7	22

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55	Segregation in Strongly Ordering Compounds: A Key Role of Constitutional Defects. <i>Physical Review Letters</i> , 2002, 89, 266102.	2.9	42
56	Structure of the $(2\sqrt{2}\times 2)$ -Br/Pt(110) surface. <i>Physical Review B</i> , 2002, 65, .	1.1	43
57	Deep-going reconstruction of Ir(100)- $5\sqrt{3}\times\sqrt{3}$. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 12353-12365.	0.7	53
58	Equilibration processes in surfaces of the binary alloy Fe-Al. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 4145-4164.	0.7	18
59	Atomic Structure of Ultrathin Iron Silicide Films on Si(111): Metastable Phases and a New Template Structure. <i>Materials Research Society Symposia Proceedings</i> , 2002, 749, 1.	0.1	0
60	Segregation and ordering at Fe $_{1-x}$ Al $_x$ (100) surfaces – a model case for binary alloys. <i>Surface Science</i> , 2001, 474, 81-97.	0.8	26
61	Quantification of substitutional disorder and atomic vibrations by LEED – the role of parameter correlations. <i>Surface Science</i> , 2001, 488, 219-232.	0.8	17
62	Surfactant-induced structures in the heteroepitaxial growth of Co on Cu(111). <i>Journal of Physics Condensed Matter</i> , 2001, 13, 9897-9911.	0.7	5
63	Equilibration of stoichiometrically distorted Fe $_{1-x}$ Al $_x$ (100) surfaces. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 1781-1791.	0.7	14
64	Surfactant-induced surface restructuring: $(4\sqrt{2}\times 4)$ -Pb/Cu(111). <i>Journal of Physics Condensed Matter</i> , 2001, 13, 1793-1803.	0.7	22
65	Structure of ultrathin Fe films on Cu(100) prepared by pulsed laser deposition. <i>Physical Review B</i> , 2001, 63, .	1.1	22
66	Reduced coercivity in ferromagnetic Co/Cu coevaporated epitaxial films on Cu(111). <i>Applied Physics Letters</i> , 2000, 77, 889-891.	1.5	4
67	Surfactant action in heteroepitaxy: Growth of Co on $(4\sqrt{2}\times 4)$ -Pb/Cu(111) studied by LEED and STM. <i>Physical Review B</i> , 2000, 62, 5144-5149.	1.1	16
68	The role of an energy-dependent inner potential in quantitative low-energy electron diffraction. <i>Surface Science</i> , 2000, 458, 155-161.	0.8	39
69	Unusual multilayer relaxation of the Mo(111) surface induced by hydrogen. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 1873-1888.	0.7	11
70	Structure of ultrathin Ni/Cu(001) films as a function of film thickness, temperature, and magnetic order. <i>Physical Review B</i> , 1999, 59, 12641-12646.	1.1	99
71	Fe thin-film growth on Au(100): A self-surfactant effect and its limitations. <i>Physical Review B</i> , 1999, 59, 15966-15974.	1.1	58
72	Adsorption and desorption of hydrogen on Rh(311) and comparison with other Rh surfaces. <i>Surface Science</i> , 1999, 421, 279-295.	0.8	31

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73	Face-dependent segregation and relaxation in Mo _{0.75} Re _{0.25} random alloy surfaces. Surface Science, 1999, 431, 220-231.	0.8	16
74	The hydrogenated and bare diamond (110) surface: a combined LEED-, XPS-, and ARPES study. Surface Science, 1999, 443, 177-185.	0.8	37
75	Crystallography of ultrathin iron, cobalt and nickel films grown epitaxially on copper. Journal of Physics Condensed Matter, 1999, 11, 9437-9454.	0.7	43
76	Surface structure and segregation of bimetallic bcc-type alloys. Journal of Physics Condensed Matter, 1999, 11, 8377-8396.	0.7	17
77	The structure of the surface compound CrN formed by cosegregation on a Fe-15%Cr-N(100) single crystal surface. Surface Science, 1998, 400, 87-94.	0.8	13
78	Hydrogen on Mo _x Re _{1-x} (100) - the impact of alloying on the adsorption structure. Surface Science, 1998, 401, 455-468.	0.8	6
79	Segregation phenomena on surfaces of the ordered bimetallic alloy FeAl. Surface Science, 1998, 412-413, 69-81.	0.8	38
80	Cosegregation-Induced Epitaxial Growth of Two- and Three-Dimensional Compounds on Multicomponent Alloy Surfaces. Materials Research Society Symposia Proceedings, 1998, 528, 3.	0.1	1
81	Surface crystallography by low energy electron diffraction. Zeitschrift Fur Kristallographie - Crystalline Materials, 1998, 213, 615-634.	0.4	22
82	Hydrogen-induced buckling of Mo(110) at submonolayer coverage. Journal of Physics Condensed Matter, 1997, 9, 6481-6491.	0.7	14
83	LEED STRUCTURE ANALYSES OF THE CLEAN AND FULLY HYDROGEN-COVERED W(110) and Mo(110) SURFACES. Surface Review and Letters, 1997, 04, 1291-1295.	0.5	27
84	Strong relaxations at the Cr ₂ O ₃ (0001) surface as determined via low-energy electron diffraction and molecular dynamics simulations. Surface Science, 1997, 372, L291-L297.	0.8	140
85	Deep layer oscillatory segregation and relaxation of substitutionally disordered Mo _x Re _{1-x} (100) surfaces. Surface Science, 1997, 376, 319-329.	0.8	22
86	Oxidation of low-index FeAl surfaces. Surface Science, 1997, 380, 335-351.	0.8	76
87	Hydrogen on W(110): an adsorption structure revisited. Surface Science, 1997, 382, 288-299.	0.8	66
88	Hydrogen on Metals: Adsorption Sites and Substrate Reconstructions. Physica Status Solidi A, 1997, 159, 225-233.	1.7	20
89	Segregation-induced surface structures of carbon-doped Mo _{0.75} Re _{0.25} (100). Surface Science, 1996, 352-354, 592-596.	0.8	12
90	Adsorption Structures of Hydrogen on Transition Metal Surfaces as Detected by LEED. Zeitschrift Fur Physikalische Chemie, 1996, 197, 173-191.	1.4	27

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91	Müller et al. Reply: Physical Review Letters, 1996, 76, 3660-3660.	2.9	6
92	Segregation-induced subsurface restructuring of FeAl(100). Physical Review B, 1996, 54, R5275-R5278.	1.1	19
93	ORDERED AND DISORDERED RIPPLING IN THE CoAl(110)-(1 \times 1) SURFACE. Surface Review and Letters, 1996, 03, 1409-1415.	0.5	26
94	ADSORBATE-INDUCED VARIATION OF THE STRUCTURE AND COMPOSITION OF THE Mo _{0.75} Re _{0.25} (100) SURFACE. Surface Review and Letters, 1996, 03, 1701-1711.	0.5	14
95	The (0001)-surface of 6H α -SiC: morphology, composition and structure. Applied Surface Science, 1995, 89, 175-185.	3.1	112
96	In-Plane Lattice Reconstruction of Cu(100). Physical Review Letters, 1995, 75, 2859-2862.	2.9	39
97	Hydrogen adsorption on Fe(211): structural, thermodynamic and kinetic properties. Surface Science, 1995, 324, 289-304.	0.8	15
98	Hydrogen induced missing row reconstruction of Fe(211). Surface Science, 1995, 326, 93-100.	0.8	20
99	Oxygen induced missing row reconstruction of substitutionally disordered Mo _{0.75} Re _{0.25} (100). Surface Science, 1995, 337, 224-231.	0.8	6
100	Composition and structure of the (100) and (110) surfaces of FeAl. Surface Science, 1995, 322, 103-115.	0.8	51
101	AES-depth-profiling of thin annealed Pt-films on Si(100). European Physical Journal D, 1994, 44, 239-243.	0.4	2
102	Application of chemical tensor LEED to Mo _x Re _{1-x} (100) surfaces. Surface Science, 1994, 307-309, 434-439.	0.8	31
103	Thermal desorption kinetics of hydrogen on rhodium (110). Surface Science, 1994, 303, 1-15.	0.8	30
104	Phase diagram for hydrogen adsorption on Rh(311). Surface Science, 1993, 287-288, 84-88.	0.8	10
105	Hydrogen-induced restructuring of close-packed metal surfaces: H/Ni(111) and H/Fe(110). Physical Review B, 1993, 47, 15969-15972.	1.1	105
106	Adsorption of hydrogen on Fe(110) at cryogenic temperatures investigated by low energy electron diffraction. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 501-507.	0.9	35
107	Structure and ordering of 2,3-dimethyl-2-butene and 2-butyne on the Ni(111) surface. Surface Science, 1992, 272, 182-188.	0.8	8
108	LEED structure analysis of p(3 \times 3)R30 $^\circ$ -O/Ni(111). Surface Science, 1991, 253, 99-106.	0.8	50

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109	Hydrogen on Rh(110): a walk through the phase diagram. Surface Science, 1991, 249, 61-74.	0.8	25
110	Adsorption and thermal induced decomposition of ethylene and isobutene on the Ni(111) surface. Progress in Surface Science, 1990, 35, 103-111.	3.8	7
111	On the kinetics of hydrocarbon decomposition on the Ni(111) surface—a time-resolved HREELS study. Vacuum, 1990, 41, 121-125.	1.6	4
112	Adsorption and thermal induced decomposition of isobutene on Ni(111). Journal of Electron Spectroscopy and Related Phenomena, 1990, 54-55, 687-696.	0.8	7
113	Structure determination of $c(4 \times 2)Cs/Rh(100)$ by LEED. Surface Science, 1989, 221, 11-22.	0.8	34
114	A LEED investigation of clean and oxygen covered Rh(100). Surface Science, 1988, 207, 55-65.	0.8	120
115	Adsorption of Hydrogen on Rhodium (110). Springer Series in Surface Sciences, 1988, , 201-206.	0.3	1
116	Surface relaxation change by hydrogen adsorption on Rh(110). Surface Science, 1987, 188, L729-L734.	0.8	61
117	Kinetics of the irreversible transition $Pt(110)1\sqrt{3} \times 1\sqrt{3}$ as observed by LEED. Surface Science, 1987, 191, 174-184.	0.8	41
118	Reactivity of carbon dioxide at nickel (110). Journal of Electron Spectroscopy and Related Phenomena, 1987, 44, 141-148.	0.8	26
119	Ordered phases of C_2H_2 and C_2H_4 on the Ni(111) face. Surface Science, 1986, 178, 693-703.	0.8	50
120	Dynamics of the reconstruction process $Ir(100)1\sqrt{5} \times 1\sqrt{5}$. Physical Review B, 1985, 32, 6214-6221.	1.1	106
121	Low temperature ordering of potassium on $Ir(100)1\sqrt{3} \times 1$ and $Ir(100)5\sqrt{3} \times 1$. Surface Science, 1985, 152-153, 303-313.	0.8	30