Georg Held

List of Publications by Year
in descending order

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116	3,741	126858	149623
papers	citations	33 h-index	56 g-index

119	119	119	3035
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The structure of the p(â˜š3 Ã— â˜š3)R30Â° bilayer of D2O on Ru(001). Surface Science, 1994, 316, 92-102.	0.8	196
2	Operando spectroscopy study of the carbon dioxide electro-reduction by iron species on nitrogen-doped carbon. Nature Communications, 2018, 9, 935.	5.8	182
3	Adsorbate induced reconstruction by strong chemisorption: Ru(001)p(2Ã—2)-O. Surface Science, 1989, 222, 451-463.	0.8	170
4	Oxygen induced reconstruction of a close-packed surface: A LEED IV study on Ru(001)-p(2 Ã— 1)O. Surface Science, 1989, 220, 43-58.	0.8	152
5	A diffuse LEED study of the adsorption structure of disordered benzene on Pt(111). Surface Science, 1991, 249, 21-34.	0.8	139
6	Experimental Evidence for a Partially Dissociated Water Bilayer on Ru{0001}. Physical Review Letters, 2004, 93, 196102.	2.9	130
7	Kinetic parameters of CO adsorbed on Pt(111) studied by in situ high resolution x-ray photoelectron spectroscopy. Journal of Chemical Physics, 2002, 117, 10852-10859.	1.2	113
8	Determination of adsorption sites of pure and coadsorbed CO on Ni(111) by high resolution X-ray photoelectron spectroscopy. Surface Science, 1998, 398, 154-171.	0.8	109
9	The local adsorption geometry and electronic structure of alanine on Cu{110}. Surface Science, 2006, 600, 1924-1935.	0.8	94
10	Isotope effects in structure and kinetics of water adsorbates on Ru(001). Surface Science, 1995, 327, 301-320.	0.8	91
11	Realistic molecular distortions and strong substrate buckling induced by the chemisorption of benzene on Ni{111}. Journal of Chemical Physics, 1996, 105, 11305-11312.	1.2	74
12	Dissociation and oxidation of methanol on Cu(). Surface Science, 2002, 507-510, 845-850.	0.8	67
13	A LEEDâ€"IV investigation of the Ru(001)-p(2 Ã— 1)-H structure. Surface Science, 1992, 271, 21-31.	0.8	66
14	Low-temperature partial dissociation of water on Cu(110). Chemical Physics Letters, 2003, 377, 163-169.	1.2	66
15	Chemical composition and reactivity of water on hexagonal Pt-group metal surfaces. Physical Chemistry Chemical Physics, 2008, 10, 6150.	1.3	64
16	Enantiospecific Adsorption of Alanine on the Chiral Cu{531} Surface. Journal of Physical Chemistry C, 2007, 111, 8331-8336.	1.5	63
17	Structural rearrangement by coadsorption: a LEED IV determination of the Ru(001)-p(2 Ã— 2)(2O + CO) structure. Surface Science, 1994, 317, 131-142.	0.8	56
18	Structural Isotope Effect in Water Bilayers Adsorbed on Ru(001). Physical Review Letters, 1995, 74, 4221-4224.	2.9	55

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19	Methanol Synthesis at a Wide Range of H₂/CO₂ Ratios over a Rhâ€ĥn Bimetallic Catalyst. Angewandte Chemie - International Edition, 2020, 59, 16039-16046.	7.2	54
20	The geometry of ordered benzene layers on Ru(001). Surface Science, 1995, 325, L379-L384.	0.8	51
21	A lowâ€energy electron diffraction data acquisition system for very low electron doses based upon a slow scan charge coupled device camera. Review of Scientific Instruments, 1996, 67, 378-383.	0.6	51
22	Global and Local Expression of Chirality in Serine on the Cu{110} Surface. Langmuir, 2010, 26, 18841-18851.	1.6	49
23	Light-Atom Location in Adsorbed Benzene by Experiment and Theory. Physical Review Letters, 2001, 87, 216102.	2.9	47
24	The Importance of Attractive Three-Point Interaction in Enantioselective Surface Chemistry: Stereospecific Adsorption of Serine on the Intrinsically Chiral Cu{531} Surface. Journal of the American Chemical Society, 2012, 134, 9615-9621.	6.6	47
25	Adsorbate induced relaxations of S/Ru(0001): p(2 Ã— 2) and p(âˆš3 Ã— âˆš3)R30Â° structures. Surface Science, 1994, 303, 77-88.	0.8	46
26	The structure of the mixed OH+H2O overlayer on Pt{111}. Journal of Chemical Physics, 2005, 123, 064711.	1.2	45
27	A LEED-IV determination of the Ru(001)-p(2 Ã— 2) (O + CO) structure: A coadsorbate-induced molecular tilt. Surface Science, 1995, 340, 159-171.	0.8	44
28	The adsorption and stability of sulfur containing amino acids on Cu{531}. Surface Science, 2009, 603, 1253-1261.	0.8	44
29	Chemical composition and reactivity of water on clean and oxygen-covered Pd{111}. Surface Science, 2008, 602, 3540-3549.	0.8	43
30	Ambient-pressure endstation of the Versatile Soft X-ray (VerSoX) beamline at Diamond Light Source. Journal of Synchrotron Radiation, 2020, 27, 1153-1166.	1.0	40
31	The Chemistry of Intrinsically Chiral Surfaces. Topics in Catalysis, 2008, 48, 128-136.	1.3	39
32	Coverage-dependent changes in the adsorption geometries of ordered benzene layers on Ru(0001). Surface Science, 2001, 475, 18-36.	0.8	35
33	Study of the evolution of FeN C and Fe3C species in Fe/N/C catalysts during the oxygen reduction reaction in acid and alkaline electrolyte. Journal of Power Sources, 2021, 490, 229487.	4.0	34
34	Alignment of a Model Amyloid Peptide Fragment in Bulk and at a Solid Surface. Journal of Physical Chemistry B, 2010, 114, 8244-8254.	1.2	33
35	A Step toward the Wet Surface Chemistry of Glycine and Alanine on Cu{110}: Destabilization and Decomposition in the Presence of Near-Ambient Water Vapor. Journal of the American Chemical Society, 2011, 133, 6659-6667.	6.6	33
36	The structure of dense sulphur layers on Ru(0001) I. The c(2 Ã— 4) structure. Surface Science, 1994, 316, 81-91.	0.8	32

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37	Hydrogen Bond-Induced Pair Formation of Glycine on the Chiral Cu{531} Surface. Langmuir, 2010, 26, 10918-10923.	1.6	32
38	Surface crystallography of Re(0001)â˜'(2Ã—2)â˜'S and Re(0001)â˜'(2âˆš3Ã— 2âˆš3)R30Â°â˜'6S: a combined LEED and STM study. Surface Science, 1994, 312, 10-20.	0.8	31
39	Complete Experimental Structure Determination of the p(3 Ã— 2)pg Phase of Glycine on Cu{110}. Journal of Physical Chemistry C, 2012, 116, 618-625.	1.5	30
40	Surface chemistry of glycine on Pt{111} in different aqueous environments. Surface Science, 2013, 607, 10-19.	0.8	30
41	The growth of thin Cu layers on Ni(111) studied by CO titration and photoelectron spectroscopy. Surface Science, 2000, 453, 201-213.	0.8	29
42	Elucidating the mechanism of the CO₂ methanation reaction over Niâ€“Fe hydrotalcite-derived catalysts via surface-sensitive in situ XPS and NEXAFS. Physical Chemistry Chemical Physics, 2020, 22, 18788-18797.	1.3	29
43	Water adsorption on O-covered Ru{0001}: Coverage-dependent change from dissociation to molecular adsorption. Chemical Physics Letters, 2005, 414, 311-315.	1.2	28
44	Modifying the adsorption characteristics of water on Ru{0001} with preadsorbed oxygen. Physical Review B, 2008, 78, .	1.1	26
45	The Partial Oxidation of Methane Over Pd/Al2O3 Catalyst Nanoparticles Studied In-Situ by Near Ambient-Pressure X-ray Photoelectron Spectroscopy. Topics in Catalysis, 2016, 59, 516-525.	1.3	26
46	The surface geometry of carbonmonoxide and hydrogen co-adsorbed on Ni{111}. Surface Science, 2005, 574, 193-204.	0.8	24
47	The Structure of the Chiral Pt{531} Surface:Â A Combined LEED and DFT Study. Journal of Physical Chemistry B, 2005, 109, 22456-22462.	1.2	24
48	The adsorption geometry and chemical state of lysine on Cu{110}. Surface Science, 2011, 605, 468-472.	0.8	23
49	The Study of Chiral Adsorption Systems Using Synchrotron-Based Structural and Spectroscopic Techniques: Stereospecific Adsorption of Serine on Au-Modified Chiral Cu{531} Surfaces. Topics in Catalysis, 2011, 54, 1414-1428.	1.3	22
50	Adsorption Behavior of Organic Molecules: A Study of Benzotriazole on Cu(111) with Spectroscopic and Theoretical Methods. Langmuir, 2019, 35, 882-893.	1.6	22
51	Benzene adsorption on a pseudomorphic Cu monolayer on Ni(111) â€“ a combined TPD and ARUPS study. Surface Science, 1999, 437, 125-136.	0.8	21
52	Analysis of thermal vibrations by temperature-dependent low energy electron diffraction: comparison of soft modes of pure and O-coadsorbed CO on Ru(0001). Surface Science, 1999, 441, 91-106.	0.8	21
53	Experimental structure determination of the chemisorbed overlayers of chlorine and iodine on Au{111}. Physical Chemistry Chemical Physics, 2010, 12, 10754.	1.3	21
54	A molecular T-matrix approach to calculating Low-Energy Electron Diffraction intensities for ordered molecular adsorbates. Surface Science, 2005, 579, 89-99.	0.8	20

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55	Synergetic Effects of the Cu/Pt{110} Surface Alloy:â€‰ Enhanced Reactivity of Water and Carbon Monoxide. Journal of Physical Chemistry C, 2008, 112, 6422-6429.	1.5	20
56	Dissociation of water on oxygen-covered Rh{111}. Journal of Chemical Physics, 2009, 131, 214707.	1.2	20
57	Model car-exhaust catalyst studied by TPD and TP-RAIRS: Surface reactions of NO on clean and O-covered Ir{100}. Surface Science, 2005, 586, 1-14.	0.8	19
58	Phase mixing and phase separation accompanying the catalytic oxidation of CO on Ir{100}. Surface Science, 2007, 601, 1285-1295.	0.8	19
59	Fitting dozens of coordinates by LEED: automated determination of complex surface structures. Surface Science, 1993, 287-288, 428-431.	0.8	18
60	THE ORIENTATION OF BENZENE ON BIMETALLIC SURFACES. Surface Review and Letters, 1999, 06, 893-901.	0.5	17
61	Energy-Dependent Cancellation of Diffraction Spots due to Surface Roughening. Physical Review Letters, 2005, 95, 036102.	2.9	17
62	Surface Chemistry of Alanine on Ni{111}. Journal of Physical Chemistry C, 2015, 119, 26566-26574.	1.5	17
63	Adsorption of Methyl Acetoacetate at Ni{111}: Experiment and Theory. Journal of Physical Chemistry C, 2016, 120, 27490-27499.	1.5	17
64	Methanol Synthesis at a Wide Range of H₂/CO₂ Ratios over a Rhâ€In Bimetallic Catalyst. Angewandte Chemie, 2020, 132, 16173-16180.	1.6	17
65	The surface geometries of the medium and high coverage carbon monoxide structures c(2Ã—4)â€“(2CO) and R19Â°â€“(4CO) on Ni{111}. Surface Science, 2005, 575, 343-357.	0.8	16
66	Effect of Oxygen Adsorption on the Chiral Pt{531} Surface. Journal of Physical Chemistry B, 2005, 109, 6159-6163.	1.2	16
67	Surface geometry of Cu{531}. Physical Review B, 2009, 79, .	1.1	16
68	Surface chemistry of alanine on Cu{111}: Adsorption geometry and temperature dependence. Surface Science, 2014, 629, 114-122.	0.8	16
69	Rearrangement of stepped Ru(001) surfaces upon oxygen adsorption. Surface Science, 1995, 331-333, 1122-1128.	0.8	14
70	Electronic properties of a pseudomorphic Cu-layer on Ni(111). Applied Surface Science, 1999, 142, 18-22.	3.1	14
71	Highly Proton-Ordered Water Structures on Oxygen Precovered Ru{0001}. Journal of Physical Chemistry A, 2011, 115, 7205-7209.	1.1	14
72	Investigations of Carbon Nitride-Supported Mn3O4 Oxide Nanoparticles for ORR. Catalysts, 2020, 10, 1289.	1.6	14

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73	Variations of LEED intensities with angle of incidence and the influence on spot profiles. Physical Review B, 1995, 51, 17856-17866.	1.1	13
74	A Stable Pure Hydroxyl Layer on Pt{110}-(1Ã—2). Journal of Physical Chemistry C, 2009, 113, 21755-21764.	1.5	13
75	Preventing carbon contamination of optical devices for X-rays: the effect of oxygen on photon-induced dissociation of CO on platinum. Journal of Synchrotron Radiation, 2012, 19, 570-573.	1.0	13
76	Stereochemistry and thermal stability of tartaric acid on the intrinsically chiral Cu{531} surface. Surface Science, 2016, 643, 108-116.	0.8	13
77	Surface core-level shifts of the polar semiconductor Cd(Zn)Te(100). Physical Review B, 1997, 56, 2070-2078.	1.1	12
78	Electronic structure and orientation of benzene adsorbed on a pseudomorphic Cu monolayer on Ru(0001). Surface Science, 2000, 454-456, 83-87.	0.8	12
79	On the Stability of Isolated Iridium Sites in Nâ€Rich Frameworks Against Agglomeration Under Reducing Conditions. ChemCatChem, 2022, 14, .	1.8	12
80	Correlation between chemical properties and electronic structure of pseudomorphic Cu monolayers on Ni(111) and Ru(0001). Surface Science, 2001, 477, 113-125.	0.8	11
81	Formation of a new type of chromium oxide by deposition of chromium onto water precovered Cu(111). Surface Science, 2001, 480, 73-83.	0.8	11
82	The transition from oxygen chemisorption to oxidation of ultra-thin Ni layers on Cu(111). Journal of Chemical Physics, 2001, 115, 1902-1908.	1.2	11
83	Influence of Synthesis Conditions on the Structure of Nickel Nanoparticles and their Reactivity in Selective Asymmetric Hydrogenation. ChemCatChem, 2020, 12, 1491-1503.	1.8	11
84	The interplay between geometry, electronic structure, and reactivity of Cu-Ni bimetallic (111) surfaces. Applied Physics A: Materials Science and Processing, 2003, 76, 689-700.	1.1	10
85	The adsorption geometry of sulphur on Ir{100}: A quantitative LEED study. Surface Science, 2006, 600, 880-889.	0.8	10
86	Epitaxial Growth of Ultrathin Palladium Films on Re{0001}. Journal of Physical Chemistry C, 2011, 115, 4191-4199.	1.5	10
87	Coverage-dependent molecular tilt of carbon monoxide chemisorbed on Pt{110}: A combined LEED and DFT structural analysis. Surface Science, 2012, 606, 383-393.	0.8	10
88	The electronic structure, surface properties, and in situ N₂O decomposition of mechanochemically synthesised LaMnO₃. Physical Chemistry Chemical Physics, 2020, 22, 18774-18787.	1.3	10
89	Identifying the catalyst chemical state and adsorbed species during methanol conversion on copper using ambient pressure X-ray spectroscopies. Physical Chemistry Chemical Physics, 2020, 22, 18806-18814.	1.3	9
90	Ir{100}-(1Ã—3)-H, an intermediate phase between the (1Ã—1) and the (1Ã—5) phases of Ir{100}. Surface Science, 2001, 488, 154-163.	0.8	8

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91	Temperature dependent oxidation of thin Ni layers on Cu(). Surface Science, 2002, 516, 95-102.	0.8	8
92	The Surface Geometry of Carbon Monoxide and Oxygen Co-adsorbed on Ni{111}. Zeitschrift Fur Physikalische Chemie, 2004, 218, 915-927.	1.4	8
93	Chromium nanostructures formed by dewetting of heteroepitaxial films on W(100). Physical Review B, 2012, 86, .	1.1	8
94	Operando characterisation of alumina-supported bimetallic Pdâ€“Pt catalysts during methane oxidation in dry and wet conditions. Journal Physics D: Applied Physics, 2021, 54, 174006.	1.3	8
95	Determination of H-Atom Positions in Organic Crystal Structures by NEXAFS Combined with Density Functional Theory: a Study of Two-Component Systems Containing Isonicotinamide. Journal of Physical Chemistry A, 2022, 126, 2889-2898.	1.1	8
96	Adsorption and dissociation of benzene on bimetallic surfacesâ€”the influence of surface geometry and electronic structure. Journal of Physics Condensed Matter, 2003, 15, R1501-R1516.	0.7	7
97	The exclusive use of integer-order spots for LEED-IV structure analysis of adsorption systems: p(2Ã—2)-O on Ni{111}. Surface Science, 2005, 594, 203-211.	0.8	7
98	Oxidation of polycrystalline Ni studied by spectromicroscopy: Phase separation in the early stages of crystallite growth. Physical Review B, 2010, 81, .	1.1	7
99	Dynamics over a Cuâ€“graphite electrode during the gas-phase CO₂ reduction investigated by APXPS. Faraday Discussions, 2022, 236, 126-140.	1.6	7
100	Direct in situ spectroscopic evidence of the crucial role played by surface oxygen vacancies in the O₂-sensing mechanism of SnO₂. Chemical Science, 2022, 13, 6089-6097.	3.7	7
101	Adsorption of CO on ultrathin Cr layers on Ru(0001). Surface Science, 2002, 512, 107-116.	0.8	6
102	Observing the in situ chiral modification of Ni nanoparticles using scanning transmission X-ray microspectroscopy. Surface Science, 2014, 629, 108-113.	0.8	6
103	Combined Experimental and Theoretical Study of Methyl Acetoacetate Adsorption on Ni{100}. Journal of Physical Chemistry C, 2018, 122, 6186-6194.	1.5	6
104	â€œPop-On and Pop-Offâ€•Surface Chemistry of Alanine on Ni{111} under Elevated Hydrogen Pressures. Journal of Physical Chemistry C, 2018, 122, 7720-7730.	1.5	5
105	Adsorption of Aspartic Acid on Ni{100}: A Combined Experimental and Theoretical Study. Langmuir, 2020, 36, 9399-9411.	1.6	5
106	The Versatile Soft X-Ray (VerSoX) Beamline at Diamond Light Source. Synchrotron Radiation News, 2022, 35, 39-47.	0.2	5
107	Surface structure analysis based on the exclusive use of the specular LEED spot â€“ a theoretical study. Surface Science, 2001, 490, 274-284.	0.8	4
108	A FORTRAN-90 Low-Energy Electron Diffraction program (LEED90 v1.1). Computer Physics Communications, 2004, 161, 151-165.	3.0	3

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109	Molecular t-matrices for Low-Energy Electron Diffraction (TMOL v1.1). Computer Physics Communications, 2004, 161, 166-178.	3.0	3
110	Resonant Electron Spectroscopy: Identification of Atomic Contributions to Valence States. Faraday Discussions, 2022, , .	1.6	2
111	Identifying chemical and physical changes in wide-gap semiconductors using real-time and near ambient-pressure XPS. Faraday Discussions, 2022, , .	1.6	2
112	In situ surface analysis of palladiumâ€“platinum alloys in methane oxidation conditions. Faraday Discussions, 2022, , .	1.6	2
113	The growth of ultrathin Cr films on benzene-covered Ni(111). Applied Surface Science, 1999, 142, 327-331.	3.1	1
114	The structure of alanine anionic-zwitterionic dimers on Pd(111); formation of salt bridges. Surface Science, 2019, 679, 79-85.	0.8	1
115	Crystallography of Metal Surfaces and Adsorbed Layers. Springer Handbooks, 2020, , 197-223.	0.3	1
116	Photoelectron spectroscopy of metal surfaces for potential heterogeneous catalysis. Spectroscopic Properties of Inorganic and Organometallic Compounds, 2011, , 1-33.	0.4	0