

# Carsten Benndorf

## List of Publications by Year in descending order

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60  
papers

1,380  
citations

361413

20  
h-index

345221

36  
g-index

61  
all docs

61  
docs citations

61  
times ranked

773  
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption and orientation of NH <sub>3</sub> on Ru(001). Surface Science, 1983, 135, 164-183.	1.9	145
2	Unusually low stretching frequency for CO adsorbed on Fe(100). Surface Science, 1985, 163, L675-L680.	1.9	105
3	Removal of self-assembled monolayers of alkanethiolates on gold by plasma cleaning. Surface Science, 2005, 595, 56-63.	1.9	95
4	Adsorption of H <sub>2</sub> O on clean and oxygen-preposed Ni(110). Surface Science, 1988, 194, 63-91.	1.9	84
5	Interactions of CO + K on Ru(001): Structure and bonding. Surface Science, 1985, 164, 602-624.	1.9	78
6	H <sub>2</sub> O adsorption on Ni(100): Evidence for oriented water dimers. Surface Science, 1985, 157, 29-42.	1.9	65
7	Chemical and physical properties of laser-treated poly(ethyleneterephthalate). Journal of Applied Physics, 1990, 68, 1854-1858.	2.5	53
8	Influence of surface additives (Na and O) on the adsorption and structure of NH <sub>3</sub> , on Ni(110). Surface Science, 1985, 152-153, 587-595.	1.9	51
9	Mass and optical emission spectroscopy of plasmas for diamond synthesis. Pure and Applied Chemistry, 1994, 66, 1195-1205.	1.9	48
10	Interaction of NH <sub>3</sub> with adsorbed oxygen and sodium on Ru(001): Evidence for both local and long-range interactions. Chemical Physics Letters, 1983, 101, 59-64.	2.6	47
11	Photoelectron spectroscopic characterization of a-CO and b-CO on Fe(100). Surface Science, 1986, 177, L907-L914.	1.9	44
12	Adsorption behavior of H <sub>2</sub> O on clean and oxygen precovered Ni(s)(111). Surface Science, 1987, 182, 499-520.	1.9	44
13	Low temperature CVD diamond deposition using halogenated precursors – deposition on low melting materials: Al, Zn and glass. Diamond and Related Materials, 2001, 10, 347-351.	3.9	36
14	Adsorption and reaction of bromine with Ag(110). Surface Science, 1985, 151, 271-288.	1.9	34
15	Potassium adsorption on hydrogen- and oxygen-terminated diamond(100) surfaces. Diamond and Related Materials, 2001, 10, 519-525.	3.9	34
16	Influence of electronic and geometric structure on the ethylene-oxide adsorption on transition metal surfaces: Ag(110), Cu(110), Ni(111) and Fe(100). Surface Science, 1987, 189-190, 511-518.	1.9	28
17	Influence of steps on the H <sub>2</sub> O adsorption on Ni(s)(111). Surface Science, 1993, 287-288, 119-124.	1.9	26
18	Ethylenoxide adsorption on clean and modified CU(110) and AG(110). Applied Catalysis, 1986, 25, 165-172.	0.8	25

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19	CO adsorption on stepped Ni(111) surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 2677-2681.	2.1	24
20	Ethylene oxide adsorption on K-promoted Ni(111). Surface Science, 1990, 235, 129-141.	1.9	23
21	H/Cu(110) : kinetics of reconstruction and de-reconstruction. Surface Science, 1994, 307-309, 789-797.	1.9	21
22	Adsorption of fluorine and chlorine on the diamond (100) surface. Surface Science, 1998, 402-404, 227-231.	1.9	21
23	H <sub>2</sub> O adsorption on Ni(s) (111) surfaces: Evidence for a step induced influence on the adsorption geometry. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 3026-3031.	2.1	20
24	Summary Abstract: Adsorption and dissociation of ethylene oxide on clean and oxygen-covered Cu(110). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 1355-1356.	2.1	18
25	A microstructural investigation of Au-a-C:H Films. Surface and Coatings Technology, 1989, 39-40, 275-284.	4.8	16
26	CO adsorption on Ni(551). Surface Science, 1991, 251-252, 872-876.	1.9	15
27	H <sub>2</sub> O adsorption on alkali (Li, Na and K) precovered Ni(775). Surface Science, 1998, 405, 121-137.	1.9	15
28	Investigation of oxide (V <sub>2</sub> O <sub>5</sub> ) thin films as electrodes for rechargeable microbatteries using Li. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1494-1499.	2.1	15
29	Ethylene oxide adsorption on K-modified Ag(110). Surface Science, 1991, 251-252, 1123-1127.	1.9	14
30	Adsorption and reaction of bromine with Ag(110): A photoemission study. Surface Science, 1986, 177, 515-525.	1.9	13
31	UPS and HREELS investigation of ethylene oxide and potassium coadsorption on Ni(111). Surface Science, 1992, 269-270, 341-346.	1.9	12
32	The coadsorption of Na and H <sub>2</sub> O on Ni(s)(111). Surface Science, 1994, 307-309, 28-33.	1.9	12
33	Using fluorine and chlorine in the diamond CVD process. Diamond and Related Materials, 1999, 8, 231-235.	3.9	12
34	The deposition of Ag <sub>i</sub> -C:H films: a tool to understand the role of carbide-forming metals in the Me <sub>i</sub> -C:H deposition process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 140, 764-769.	5.6	11
35	Oxygen adsorption on CuNi(110) studied with leed and hreels: evidence for an oxygen induced reconstruction with a p(2 Å <sup>-2</sup> ) overlayer. Surface Science, 1985, 152-153, 399-408.	1.9	10
36	Ethylene-oxide adsorption on Ni(111): Hreels and Arups investigations. Journal of Electron Spectroscopy and Related Phenomena, 1987, 44, 109-120.	1.7	9

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37	Coadsorption of K and CO on Cu(111) surfaces. <i>Surface Science</i> , 1995, 331-333, 110-115.	1.9	9
38	Titanium containing DLC coatings from a PACVD process using titanium (IV) isopropylate as a precursor. <i>Diamond and Related Materials</i> , 2000, 9, 811-814.	3.9	9
39	Ethylene oxide adsorption on K <sup>+</sup> modified Ni(111): Thermal stabilization and dissociation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1990, 8, 2431-2434.	2.1	8
40	Water adsorption structures on flat and stepped Ru(0001) surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000, 18, 1520-1525.	2.1	8
41	Fe <sup>+</sup> -C:H-film growth by plasma-assisted CVD from organometallic precursors. <i>Thin Solid Films</i> , 1996, 290-291, 200-205.	1.8	7
42	Identification of Surface Processes in Individual Minerals of a Complex Ore through the Analysis of Polished Sections Using Polarization Microscopy and X-ray Photoelectron Spectroscopy (XPS). <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 427.	2.0	5
43	Recent Advances Using ESDIAD: Applications to Surface Chemistry. <i>Springer Series in Surface Sciences</i> , 1985, , 104-115.	0.3	5
44	Unusually low stretching frequency for CO adsorbed on Fe(100). <i>Surface Science Letters</i> , 1985, 163, L675-L680.	0.1	3
45	Adsorption and orientation of NH <sub>3</sub> on Ru(001). <i>Surface Science Letters</i> , 1983, 135, A466.	0.1	1
46	Summary Abstract: H <sub>2</sub> O adsorption on clean and oxygen <sup>+</sup> covered stepped Ni(s)(111). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1987, 5, 696-698.	2.1	1
47	Deposition Experiments with Separated Atomic Hydrogen and CH <sub>4</sub> Sources. <i>NATO ASI Series Series B: Physics</i> , 1991, , 549-554.	0.2	1
48	Oxygen adsorption on CuNi(110) studied with LEED and HREELS: Evidence for an oxygen induced reconstruction with a p(2 $\times$ 2) overlayer. <i>Surface Science Letters</i> , 1985, 152-153, A127.	0.1	0
49	Influence of surface additives (Na and O) on the adsorption and structure of NH <sub>3</sub> on Ni(110). <i>Surface Science Letters</i> , 1985, 152-153, A137.	0.1	0
50	Interactions of CO + K on Ru(001): Structure and bonding. <i>Surface Science Letters</i> , 1985, 164, A736-A737.	0.1	0
51	Adsorption and reaction of bromine with Ag(110). <i>Surface Science Letters</i> , 1985, 151, A79-A80.	0.1	0
52	H <sub>2</sub> O adsorption on Ni(110): Evidence for oriented water dimers. <i>Surface Science Letters</i> , 1985, 157, A378.	0.1	0
53	Ethylene and ethylene-oxide adsorption on Ag(110). <i>Surface Science Letters</i> , 1986, 178, A669.	0.1	0
54	Adsorption and reaction of bromine with Ag(110): A photoemission study. <i>Surface Science Letters</i> , 1986, 177, A608.	0.1	0

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55	Photoelectron spectroscopic characterization of a-CO and b-CO on Fe(100). Surface Science Letters, 1986, 177, L907-L914.	0.1	0
56	Adsorption behavior of H <sub>2</sub> O on clean and oxygen precovered Ni(s)(111). Surface Science Letters, 1987, 182, A142-A143.	0.1	0
57	NH <sub>3</sub> adsorption and dissociation on a stepped Fe(s)(100) surface. Surface Science Letters, 1987, 187, A328.	0.1	0
58	CO adsorption on Ni(551). Surface Science Letters, 1991, 251-252, A364.	0.1	0
59	Ethylene oxide adsorption on K-modified Ag(110). Surface Science Letters, 1991, 251-252, A380.	0.1	0
60	Influence of steps on the H <sub>2</sub> O adsorption on Ni(s)(111). Surface Science Letters, 1993, 287-288, A372.	0.1	0