

# Dietrich Menzel

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5836055/publications.pdf>

Version: 2024-02-01

67  
papers

3,865  
citations

185998

28  
h-index

118652

62  
g-index

69  
all docs

69  
docs citations

69  
times ranked

2618  
citing authors

#	ARTICLE	IF	CITATIONS
1	Desorption from Metal Surfaces by Low-Energy Electrons. <i>Journal of Chemical Physics</i> , 1964, 41, 3311-3328.	1.2	986
2	Photochemistry on Metal Nanoparticles. <i>Chemical Reviews</i> , 2006, 106, 4301-4320.	23.0	442
3	Adsorption of oxygen and oxidation of CO on the ruthenium (001) surface. <i>Surface Science</i> , 1975, 48, 304-328.	0.8	374
4	Desorption induced by electronic transitions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1986, 13, 507-517.	0.6	153
5	Electron-Impact Desorption of Carbon Monoxide from Tungsten. <i>Journal of Chemical Physics</i> , 1964, 41, 3329-3351.	1.2	116
6	Adsorption of CO on (001) Ruthenium at Temperatures $\approx$ 300 K. <i>Japanese Journal of Applied Physics</i> , 1974, 13, 229.	0.8	104
7	Desorption from Surfaces by Slow-Electron Impact. <i>Journal of Chemical Physics</i> , 1964, 40, 1164-1165.	1.2	101
8	SCF-X $\pm$ -SW model calculations for metal clusters of nickel, copper, and silver and for the oxygen chemisorption on these metals. <i>Chemical Physics</i> , 1976, 13, 243-256.	0.9	101
9	High resolution, wide range, thermal desorption spectrometry of rare gas layers: sticking, desorption kinetics, layer growth, phase transitions, and exchange processes. <i>Surface Science</i> , 1992, 272, 27-33.	0.8	101
10	Ultrafast charge transfer at surfaces accessed by core electron spectroscopies. <i>Chemical Society Reviews</i> , 2008, 37, 2212.	18.7	89
11	SURFACE SCIENCE: Water on a Metal Surface. <i>Science</i> , 2002, 295, 58-59.	6.0	72
12	The coverage dependence of the sticking probability of Ar on Ru(001). <i>Journal of Chemical Physics</i> , 1991, 95, 9266-9276.	1.2	67
13	Interconversion of $\hat{\pm}$ -Fe <sub>2</sub> O <sub>3</sub> and Fe <sub>3</sub> O <sub>4</sub> Thin Films: Mechanisms, Morphology, and Evidence for Unexpected Substrate Participation. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29068-29076.	1.5	66
14	Structural Isotope Effect in Water Bilayers Adsorbed on Ru(001). <i>Physical Review Letters</i> , 1995, 74, 4221-4224.	2.9	55
15	Valence and core excitations in rare gas mono- and multilayers: Production, decay, and desorption of neutrals and ions. <i>Applied Physics A: Solids and Surfaces</i> , 1990, 51, 163-171.	1.4	52
16	Structural evidence for chemical contributions in the bonding of the heavy rare gases on a close-packed transition metal surface: Xe and Kr on Ru(001). <i>Chemical Physics Letters</i> , 1997, 270, 163-168.	1.2	49
17	The layer: preparation, characterization, and analysis of interaction effects in vibrational spectra. <i>Surface Science</i> , 1997, 389, 116-130.	0.8	48
18	Time-dependent theory of the Auger resonant Raman effect for diatomic molecules: Concepts and model calculations for N <sub>2</sub> and CO. <i>Physical Review A</i> , 1998, 58, 1225-1246.	1.0	42

#	ARTICLE	IF	CITATIONS
19	Water Formation under Silica Thin Films: Real-Time Observation of a Chemical Reaction in a Physically Confined Space. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8749-8753.	7.2	42
20	Size Effects in Thermal and Photochemistry of $(\text{NO})_2$ on Ag Nanoparticles. <i>Physical Review Letters</i> , 2008, 101, 146103.	2.9	41
21	Enhanced Photoinduced Desorption from Metal Nanoparticles by Photoexcitation of Confined Hot Electrons Using Femtosecond Laser Pulses. <i>Physical Review Letters</i> , 2011, 107, 047401.	2.9	41
22	Inelastic interactions of slow electrons with adsorbed particles: Dependence of the interaction cross sections on temperature. <i>Surface Science</i> , 1969, 14, 340-350.	0.8	36
23	Desorption phenomena. , 1975, , 101-142.		36
24	Self-Assembly of Graphene Nanoblister Sealed to a Bare Metal Surface. <i>Nano Letters</i> , 2016, 16, 1808-1817.	4.5	36
25	The geometry of the saturated $(2 \times 2)$ -NO adlayer on Ru(001): a structure with three different sites. <i>Surface Science</i> , 1997, 391, 47-58.	0.8	35
26	Thirty years of MGR: How it came about, and what came of it. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1995, 101, 1-10.	0.6	34
27	Auger resonant Raman effect for dissociative core-excited states: General treatment and application to the HCl case. <i>Physical Review A</i> , 1999, 60, 2159-2175.	1.0	33
28	Two-photon photoemission from silver nanoparticles on thin alumina films: Role of plasmon excitation. <i>Surface Science</i> , 2005, 593, 43-48.	0.8	33
29	Inelastic Interactions of Slow Electrons with Adsorbed Particles. <i>Angewandte Chemie International Edition in English</i> , 1970, 9, 255-266.	4.4	31
30	A systematic investigation of the geometrical structures of four oxygen/nitric oxide coadsorbate layers on Ru(001). <i>Surface Science</i> , 1999, 419, 272-290.	0.8	29
31	Formation and Geometry of a High-Coverage Oxygen Adlayer on Ru(001), the $p(2 \times 2)$ - $\text{O}$ Phase. <i>Israel Journal of Chemistry</i> , 1998, 38, 339-348.	1.0	28
32	Anomalies in Surface Kinetics Caused by Isotope Dependent Compression and Phonon Stiffening of Molecular Hydrogen Monolayers on a Transition Metal Surface. <i>Physical Review Letters</i> , 1995, 74, 1147-1150.	2.9	22
33	ADSORBATE-INDUCED GLOBAL AND LOCAL EXPANSIONS AND CONTRACTIONS OF A CLOSE-PACKED TRANSITION METAL SURFACE. <i>Surface Review and Letters</i> , 1997, 04, 1283-1289.	0.5	22
34	Insights into Reaction Kinetics in Confined Space: Real Time Observation of Water Formation under a Silica Cover. <i>Journal of the American Chemical Society</i> , 2021, 143, 8780-8790.	6.6	22
35	The influence of electronegative coadsorbates on the geometry of benzene on Ru(001). <i>Surface Science</i> , 1997, 384, 179-191.	0.8	20
36	CASE STUDIES IN SURFACE GEOMETRY: ADSORBATE AND COADSORBATE STRUCTURES ON Ru(001), AND SOME IMPLICATIONS. <i>Surface Review and Letters</i> , 1999, 06, 835-846.	0.5	20

#	ARTICLE	IF	CITATIONS
37	Electronically induced surface chemistry: localised bond breaking versus delocalisation. Surface and Interface Analysis, 2006, 38, 1702-1711.	0.8	19

38	First-principles calculation of charge transfer at surfaces: The case of core-excited $\pi^*$		
----	---	--	--

#	ARTICLE	IF	CITATIONS
55	Photoelectron spectroscopy of adsorption layers. <i>Critical Reviews in Solid State and Materials Sciences</i> , 1978, 7, 357-384.	6.8	6
56	The geometries of coadsorbate layers of O and H on Ru(001): How well can quantitative LEED see hydrogen atoms?. <i>Surface Science</i> , 2009, 603, 1397-1404.	0.8	6
57	Wasserbildung unter dünnen Silikafilmen: Echtzeitbeobachtung einer chemischen Reaktion in einem physikalisch eingegrenzten Raum. <i>Angewandte Chemie</i> , 2018, 130, 8885-8889.	1.6	6
58	Lateral interactions and non-equilibrium in surface kinetics. <i>Surface Science</i> , 2016, 650, 187-195.	0.8	5
59	The dynamics of core hole excitation and decay in adsorbed and condensed molecules on solid surfaces. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1995, 72, 19-29.	0.8	4
60	Case studies in surface photochemistry on metal nanoparticles. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013, 31, 050817.	0.9	4
61	A Silica Bilayer Supported on Ru(0001): Following the Crystalline to Vitreous Transformation in Real Time with Spectromicroscopy. <i>Angewandte Chemie</i> , 2020, 132, 10674-10680.	1.6	4
62	Electronically induced dynamics in surface layers. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1995, 76, 73-83.	0.8	2
63	Robert-Wichard-Pohl-Preis: Ultraschneller Ladungstransfer und lokalisierter Bindungsbruch: Die Kopplung von Molekülen an Oberflächen lässt sich durch die gezielte Anregung der Elektronen im Molekül charakterisieren und beeinflussen. <i>Physik Journal</i> , 2000, 56, 81-87.	0.1	1
64	4.4 Model Systems in Catalysis for Energy Economy. , 2012, , 329-352.		1
65	Electronically Stimulated Desorption: Mechanisms, Applications, and Implications. , 1988, , 285-299.		1
66	PHOTOELECTRON SPECTROSCOPY OF ADSORPTION LAYERS. , 1984, , 289-294.		1
67	Probing ultrafast electron dynamics in condensed matter with attosecond photoemission. , 2013, , .		0