Jonas Weissenrieder

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9579672/publications.pdf

Version: 2024-02-01

81 papers	3,157 citations	172457 29 h-index	161849 54 g-index
86 all docs	86 docs citations	86 times ranked	4031 citing authors

#	Article	IF	Citations
1	Atomically dispersed iron hydroxide anchored on Pt for preferential oxidation of CO in H2. Nature, 2019, 565, 631-635.	27.8	423
2	Atomic Structure of a Thin Silica Film on a Mo(112) Substrate: A Two-Dimensional Network ofSiO4Tetrahedra. Physical Review Letters, 2005, 95, 076103.	7.8	201
3	The thickness of native oxides on aluminum alloys and single crystals. Applied Surface Science, 2015, 349, 826-832.	6.1	174
4	One-DimensionalPtO2at Pt Steps: Formation and Reaction with CO. Physical Review Letters, 2005, 95, 256102.	7.8	131
5	Experimental Evidence for a Partially Dissociated Water Bilayer on Ru{0001}. Physical Review Letters, 2004, 93, 196102.	7.8	130
6	Four-dimensional ultrafast electron microscopy of phase transitions. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 18427-18431.	7.1	107
7	Degradation of zinc in saline solutions, plasma, and whole blood. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1141-1151.	3.4	89
8	Vanadium oxide surfaces and supported vanadium oxide nanoparticles. Topics in Catalysis, 2006, 38, 117-125.	2.8	80
9	In Situ Imaging of Cu₂O under Reducing Conditions: Formation of Metallic Fronts by Mass Transfer. Journal of the American Chemical Society, 2013, 135, 16781-16784.	13.7	74
10	Influence of strain on the corrosion of magnesium alloys and zinc in physiological environments. Acta Biomaterialia, 2017, 48, 541-550.	8.3	74
11	Oxygen-induced step bunching and faceting of Rh(553): Experiment andab initiocalculations. Physical Review B, 2006, 74, .	3.2	71
12	Redox-Mediated Reconstruction of Copper during Carbon Monoxide Oxidation. Journal of Physical Chemistry C, 2014, 118, 15902-15909.	3.1	64
13	The surface oxide as a source of oxygen on Rh(1â€‰1â€‰1). Journal of Electron Spectroscopy and Related Phenomena, 2005, 144-147, 367-372.	1.7	62
14	Atomic structure of a thin silica film on aMo(112)substrate: A combined experimental and theoretical study. Physical Review B, 2006, 73, .	3.2	61
15	HIPPIE: a new platform for ambient-pressure X-ray photoelectron spectroscopy at the MAX IV Laboratory. Journal of Synchrotron Radiation, 2021, 28, 624-636.	2.4	60
16	Ultrafast Electron Microscopy (UEM):â€‰ Four-Dimensional Imaging and Diffraction of Nanostructures during Phase Transitions. Nano Letters, 2007, 7, 2552-2558.	9.1	59
17	Low operational current spin Hall nano-oscillators based on NiFe/W bilayers. Applied Physics Letters, 2016, 109, .	3.3	54
18	Role of Defects in Surface Chemistry on Cu2O(111). Journal of Physical Chemistry C, 2013, 117, 19357-19364.	3.1	52

#	Article	IF	Citations
19	Stabilization of Catalytically Active Cu⁺ Surface Sites on Titaniumâ€“Copper Mixedâ€Oxide Films. Angewandte Chemie - International Edition, 2014, 53, 5336-5340.	13.8	51
20	On the geometrical and electronic structure of an ultra-thin crystalline silica film grown on Mo(112). Surface Science, 2007, 601, 4849-4861.	1.9	48
21	The Surface Structure of Cu₂O(100). Journal of Physical Chemistry C, 2016, 120, 4373-4381.	3.1	46
22	Synthesis and Structure of Ultrathin Aluminosilicate Films. Angewandte Chemie - International Edition, 2006, 45, 7636-7639.	13.8	45
23	Oxygen structures on Fe(110). Surface Science, 2003, 527, 163-172.	1.9	42
24	In Situ Studies of Filiform Corrosion of Iron. Journal of the Electrochemical Society, 2004, 151, B165.	2.9	41
25	Formation of an Ordered Ice Layer on a Thin Silica Film. Journal of Physical Chemistry C, 2007, 111, 759-764.	3.1	41
26	Oxygen adsorption on Mo(112) surface studied by ab initio genetic algorithm and experiment. Journal of Chemical Physics, 2007, 126, 234710.	3.0	37
27	Inkjet Printed Disposable Highâ€Rate Onâ€Paper Microsupercapacitors. Advanced Functional Materials, 2022, 32, 2108773.	14.9	36
28	Mechanistic Study of CO Titration on Cu_xO/Cu(1â€‰1â€‰1) (xâ‰2) Surfaces. ChemCatChem, 2014, 6, 2364-2372.	3.7	31
29	Redox Properties of Cu₂O(100) and (111) Surfaces. Journal of Physical Chemistry C, 2018, 122, 28684-28691.	3.1	30
30	Adsorption and bonding of 2-butenal on Sn/Pt surface alloys. Journal of Catalysis, 2003, 215, 245-253.	6.2	29
31	Oxygen-deficient SnO2(110): a STM, LEED and XPS study. Surface Science, 2001, 477, 50-58.	1.9	28
32	Adsorption geometry, molecular interaction, and charge transfer of triphenylamine-based dye on rutile TiO2(110). Journal of Chemical Physics, 2010, 133, 224704.	3.0	28
33	Influence of cathode geometry on electron dynamics in an ultrafast electron microscope. Structural Dynamics, 2017, 4, 054303.	2.3	28
34	Interplay between theory and experiment in the quest for silica with reduced dimensionality grown on a Mo(112) surface. Chemical Physics Letters, 2006, 424, 115-119.	2.6	27
35	Ice-Assisted Preparation of Silica-Supported Vanadium Oxide Particles. Journal of Physical Chemistry C, 2007, 111, 5337-5344.	3.1	25
36	Comparison of the early stages of corrosion of copper and iron investigated by in situ TM-AFM. Applied Surface Science, 2002, 193, 245-253.	6.1	24

#	Article	IF	Citations
37	Characterization of the protective layer formed on zinc in whole blood. Electrochimica Acta, 2017, 258, 1476-1483.	5.2	24
38	Formation of one-dimensional molybdenum oxide on Mo(112). Surface Science, 2008, 602, 3338-3342.	1.9	23
39	Growth of stoichiometric subnanometer silica films. Applied Physics Letters, 2008, 92, .	3.3	23
40	Dehydrogenation of methanol on Cu2O(100) and (111). Journal of Chemical Physics, 2017, 146, 244702.	3.0	23
41	In Situ Studies of Sulfate Nest Formation on Iron. Journal of the Electrochemical Society, 2004, 151, B497.	2.9	22
42	CO Oxidation Over Monolayer Manganese Oxide Films on Pt(111). Catalysis Letters, 2013, 143, 1108-1115.	2.6	22
43	Reactivity at the Cu₂O(100):Cuâ€“H₂O interface: a combined DFT and PES study. Physical Chemistry Chemical Physics, 2016, 18, 30570-30584.	2.8	21
44	Investigation of the surface phase diagram of Fe()â€“S. Surface Science, 2002, 515, 135-142.	1.9	19
45	Formation of one-dimensional crystalline silica on a metal substrate. Surface Science, 2006, 600, L164-L168.	1.9	19
46	Low temperature CO induced growth of Pd supported on a monolayer silica film. Surface Science, 2006, 600, L153-L157.	1.9	18
47	Kagome-like silicene: A novel exotic form of two-dimensional epitaxial silicon. Applied Surface Science, 2020, 530, 147195.	6.1	18
48	Manipulation of Stacking Order in Td-WTe₂ by Ultrafast Optical Excitation. ACS Nano, 2021, 15, 8826-8835.	14.6	17
49	Reactions of iodobenzene on Pd(1 1 1) and Pd(1 1 0). Applied Surface Science, 2003, 212-213, 508-514.	6.1	16
50	The influence of buffer system and biological fluids on the degradation of magnesium. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 1490-1502.	3.4	15
51	Adsorption and bonding of propene and 2-butenal on Pt(1 1 1). Surface Science, 2001, 482-485, 83-89.	1.9	14
52	Photoluminescence and photoresponse from InSb/InAs-based quantum dot structures. Optics Express, 2012, 20, 21264.	3.4	14
53	The Surface Structure of Cu2O(100): Nature of Defects. Journal of Physical Chemistry C, 2019, 123, 7696-7704.	3.1	13
54	Interaction of Atomic Hydrogen with the Cu₂O(100) and (111) Surfaces. Journal of Physical Chemistry C, 2019, 123, 22172-22180.	3.1	13

#	Article	IF	Citations
55	The (1Ã—1)â†'hexagonal structural transition on Pt(100) studied by high-energy resolution core level photoemission. Journal of Chemical Physics, 2007, 127, 164702.	3.0	12
56	Zn-Mg and Zn-Ag Degradation Mechanism Under Biologically Relevant Conditions. Surface Innovations, 0, , 1-41.	2.3	12
57	Photoelectron microscopy of filiform corrosion of aluminum. Applied Surface Science, 2003, 218, 155-162.	6.1	11
58	Interaction of Sulfur Dioxide and Near-Ambient Pressures of Water Vapor with Cuprous Oxide Surfaces. Journal of Physical Chemistry C, 2017, 121, 24011-24024.	3.1	11
59	Adsorption and Decomposition of Ethanol on Cu₂O(111) and (100). Journal of Physical Chemistry C, 2019, 123, 20384-20392.	3.1	11
60	Ultrathin Ferrimagnetic GdFeCo Films with Low Damping. Advanced Functional Materials, 2022, 32, .	14.9	11
61	Auger recombination in In(Ga)Sb/InAs quantum dots. Applied Physics Letters, 2015, 106, .	3.3	10
62	Oxidation of Fe(110) in oxygen gas at 400 Â°C. Surface Science, 2016, 644, 172-179.	1.9	10
63	Adsorption site, core level shifts and charge transfer on the Pd(111)â€"I(âˆš3Ã—âˆš3) surface. Surface Science, 2006, 600, 3093-3098.	1.9	9
64	Surface concentration dependent structures of iodine on Pd(110). Journal of Chemical Physics, 2012, 137, 204703.	3.0	9
65	A well-ordered surface oxide on Fe(110). Surface Science, 2015, 639, 13-19.	1.9	9
66	Transient three-dimensional structural dynamics in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi><mml:mo>â^'</mml:m mathvariant="normal">e</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 101, .	3.2	9
67	Femtosecond laser driven precessing magnetic gratings. Nanoscale, 2021, 13, 3746-3756.	5.6	9
68	Inverse single-site Fe1(OH)X/Pt(111) model catalyst for preferential oxidation of CO in H2. Nano Research, 2022, 15, 709-715.	10.4	9
69	High-Density Isolated Fe₁O₃ Sites on a Single-Crystal Cu₂O(100) Surface. Journal of Physical Chemistry Letters, 2019, 10, 7318-7323.	4.6	8
70	Initial Fe₃O₄(100) Formation on Fe(100). Journal of Physical Chemistry C, 2019, 123, 16317-16325.	3.1	8
71	Magnetic and magneto-optical properties of TbFeCo/(Pt, Pd) multilayers optimized for short wavelength recording. Journal of Applied Physics, 1999, 85, 5091-5093.	2.5	7
72	STRUCTURE, THERMAL STABILITY, AND CO ADSORPTION PROPERTIES OF PD NANOPARTICLES SUPPORTED ON AN ULTRA-THIN SiO₂ FILM. Surface Review and Letters, 2007, 14, 927-934.	1.1	7

#	Article	IF	Citations
73	Chemical reaction and interface formation on InAs(111)â€“Co surfaces. Surface Science, 2005, 574, 181-192.	1.9	6
74	Stabilization of Cu₂O through Site-Selective Formation of a Co₁Cu Hybrid Single-Atom Catalyst. Chemistry of Materials, 2022, 34, 2313-2320.	6.7	5
75	Reactivity and Mass Transfer of Lowâ€Dimensional Catalysts. Chemical Record, 2014, 14, 857-868.	5.8	4
76	Applicability of MOS structures in monitoring catalytic properties, as exemplified for monolayer-iron-oxide-coated porous platinum films. Journal of Catalysis, 2016, 344, 583-590.	6.2	3
77	Photoelectron dispersion in metallic and insulating <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>VO</mml:mi></mml:mrow><mml:mn>2</mml:mn> thin films. Physical Review Research, 2021, 3, .	3.9	3
78	Acetic acid conversion to ketene on Cu2O(1 0 0): Reaction mechanism deduced from experimental observations and theoretical computations. Journal of Catalysis, 2021, 402, 154-165.	6.2	3
79	Structure dependent effect of silicon on the oxidation of Al(111) and Al(100). Surface Science, 2019, 684, 1-11.	1.9	2
80	Steps and catalytic reactions: CO oxidation with preadsorbed O on Rh(553). Surface Science, 2022, 715, 121928.	1.9	2
81	Sulfur dioxide interaction with thin iron oxide films on low-index surfaces of iron. Surface Science, 2021, 714, 121935.	1.9	0