

Sebastian Horch

List of Publications by Year in descending order

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36
papers

13,131
citations

331642

21
h-index

345203

36
g-index

37
all docs

37
docs citations

37
times ranked

15632
citing authors

#	ARTICLE	IF	CITATIONS
1	Identification of Active Edge Sites for Electrochemical H ₂ Evolution from MoS ₂ Nanocatalysts. <i>Science</i> , 2007, 317, 100-102.	12.6	5,149
2	Biomimetic Hydrogen Evolution: MoS ₂ Nanoparticles as Catalyst for Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2005, 127, 5308-5309.	13.7	3,497
3	Progress and Perspectives of Electrochemical CO ₂ Reduction on Copper in Aqueous Electrolyte. <i>Chemical Reviews</i> , 2019, 119, 7610-7672.	47.7	2,708
4	Structure sensitivity of the methanation reaction: H ₂ -induced CO dissociation on nickel surfaces. <i>Journal of Catalysis</i> , 2008, 255, 6-19.	6.2	411
5	Oxygen evolution on well-characterized mass-selected Ru and RuO ₂ nanoparticles. <i>Chemical Science</i> , 2015, 6, 190-196.	7.4	298
6	Enhancement of surface self-diffusion of platinum atoms by adsorbed hydrogen. <i>Nature</i> , 1999, 398, 134-136.	27.8	221
7	CO ₂ Electroreduction on Well-Defined Bimetallic Surfaces: Cu Overlayers on Pt(111) and Pt(211). <i>Journal of Physical Chemistry C</i> , 2013, 117, 20500-20508.	3.1	119
8	Structure Sensitivity in the Electrocatalytic Reduction of CO ₂ with Gold Catalysts. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3774-3778.	13.8	106
9	Interaction of xenon at surface steps. <i>Physical Review Letters</i> , 1994, 73, 1259-1262.	7.8	57
10	Polycrystalline and Single-Crystal Cu Electrodes: Influence of Experimental Conditions on the Electrochemical Properties in Alkaline Media. <i>Chemistry - A European Journal</i> , 2018, 24, 17743-17755.	3.3	46
11	Determination of iodine adlayer structures on Au(111) by scanning tunneling microscopy. <i>Journal of Chemical Physics</i> , 1997, 107, 585-591.	3.0	38
12	Fingerprint Voltammograms of Copper Single Crystals under Alkaline Conditions: A Fundamental Mechanistic Analysis. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1450-1455.	4.6	38
13	Oxygen adsorption on Pt(110)-(1 $\sqrt{2}$): new high-coverage structures. <i>Surface Science</i> , 1999, 430, L533-L539.	1.9	37
14	An ultrahigh vacuum scanning tunneling microscope for use at variable temperature from 10 to 400 K. <i>Review of Scientific Instruments</i> , 1994, 65, 3204-3210.	1.3	36
15	A scanning tunneling microscopy study of the adsorption of Xe on Pt(111) up to one monolayer. <i>Applied Physics A: Materials Science and Processing</i> , 1995, 60, 147-153.	2.3	35
16	In-situ STM study of phosphate adsorption on Cu(111), Au(111) and Cu/Au(111) electrodes. <i>Surface Science</i> , 2013, 608, 44-54.	1.9	33
17	Combined spectroscopy and microscopy of supported MoS ₂ nanoparticles. <i>Surface Science</i> , 2009, 603, 1182-1189.	1.9	30
18	Oxidation of CO and H ₂ by O ₂ and N ₂ O on Au/TiO ₂ catalysts in microreactors. <i>Journal of Catalysis</i> , 2008, 260, 86-92.	6.2	29

#	ARTICLE	IF	CITATIONS
19	Effect of Dissolved Glassware on the Structure-Sensitive Part of the Cu(111) Voltammogram in KOH. ACS Energy Letters, 2019, 4, 1645-1649.	17.4	29
20	Field emission from atomic size sources. Journal of Applied Physics, 1993, 74, 3652-3657.	2.5	27
21	Role of Surface Elastic Relaxations in an O-Induced Nanopattern on Pt(110)-(1 \times 2). Physical Review Letters, 2007, 98, 115501.	7.8	25
22	Temperature dependence of the xenon-layer morphology on platinum (111) studied with scanning tunneling microscopy. Surface Science, 1995, 331-333, 908-912.	1.9	20
23	Atomic structure of screw dislocations intersecting the Au(111) surface: A combined scanning tunneling microscopy and molecular dynamics study. Physical Review B, 2006, 74, .	3.2	18
24	Structure Sensitivity in the Electrocatalytic Reduction of CO ₂ with Gold Catalysts. Angewandte Chemie, 2019, 131, 3814-3818.	2.0	18
25	Low temperature methane oxidation on differently supported 2 nm Au nanoparticles. Gold Bulletin, 2009, 42, 13-19.	2.7	17
26	Biomimetic Hydrogen Evolution: MoS ₂ Nanoparticles as Catalyst for Hydrogen Evolution. ChemInform, 2005, 36, no.	0.0	12
27	Oxidation of methane on nanoparticulate Au/TiO ₂ at low temperature: A combined microreactor and DFT study. Catalysis Today, 2009, 142, 24-29.	4.4	12
28	On the stability of copper overlayers on Au(1 1 1) and Au(1 0 0) electrodes under low potential conditions and in the presence of CO and CO ₂ . Surface Science, 2015, 631, 155-164.	1.9	11
29	Study of underpotential deposited Cu layers on Pt(111) and their stability against CO and CO ₂ in perchloric acid. Physical Chemistry Chemical Physics, 2013, 15, 19659.	2.8	8
30	EC-STM study of the initial stages of the electrochemical Au(1 1 1)-Cd alloy formation. Surface Science, 2015, 632, 126-134.	1.9	8
31	Electrochemical Oxidation of CO on Cu Single Crystals under Alkaline Conditions. ACS Energy Letters, 2020, 5, 3437-3442.	17.4	8
32	<i>In Situ</i> Analysis of the Facets of Cu-Based Electrocatalysts in Alkaline Media Using Pb Underpotential Deposition. Langmuir, 2022, 38, 1514-1521.	3.5	8
33	Does one-dimensional (1D) adatom and cluster diffusion of Pt on the Pt(110)-(1 \times 2) surface lead to 1D ripening?. New Journal of Physics, 2005, 7, 13-13.	2.9	7
34	On the Possibilities and Considerations of Interfacing Ultra-High Vacuum Equipment with an Electrochemical Setup. ChemPhysChem, 2019, 20, 3024-3029.	2.1	7
35	Observations of reversible and irreversible structural transitions of cobalt on Si (111) with LEEM. Micron, 1999, 30, 13-20.	2.2	3
36	The electrified Cu/aqueous interface under alkaline conditions: Converging experiment and theory via kinetics. , 0, , .		0