Sebastian Horch

List of Publications by Year
in descending order

36 papers	13,131 citations	377584 21 h-index	388640 36 g-index
37 all docs	37 docs citations	37 times ranked	18174 citing authors

#	Article	IF	Citations
1	In Situ Analysis of the Facets of Cu-Based Electrocatalysts in Alkaline Media Using Pb Underpotential Deposition. Langmuir, 2022, 38, 1514-1521.	1.6	8
2	Electrochemical Oxidation of CO on Cu Single Crystals under Alkaline Conditions. ACS Energy Letters, 2020, 5, 3437-3442.	8.8	8
3	Fingerprint Voltammograms of Copper Single Crystals under Alkaline Conditions: A Fundamental Mechanistic Analysis. Journal of Physical Chemistry Letters, 2020, 11, 1450-1455.	2.1	38
4	On the Possibilities and Considerations of Interfacing Ultraâ€High Vacuum Equipment with an Electrochemical Setup. ChemPhysChem, 2019, 20, 3024-3029.	1.0	7
5	Structure Sensitivity in the Electrocatalytic Reduction of CO₂ with Gold Catalysts. Angewandte Chemie - International Edition, 2019, 58, 3774-3778.	7.2	106
6	Structure Sensitivity in the Electrocatalytic Reduction of CO2with Gold Catalysts. Angewandte Chemie, 2019, 131, 3814-3818.	1.6	18
7	Progress and Perspectives of Electrochemical CO₂ Reduction on Copper in Aqueous Electrolyte. Chemical Reviews, 2019, 119, 7610-7672.	23.0	2,708
8	Effect of Dissolved Glassware on the Structure-Sensitive Part of the Cu(111) Voltammogram in KOH. ACS Energy Letters, 2019, 4, 1645-1649.	8.8	29
9	Polycrystalline and Singleâ€Crystal Cu Electrodes: Influence of Experimental Conditions on the Electrochemical Properties in Alkaline Media. Chemistry - A European Journal, 2018, 24, 17743-17755.	1.7	46
10	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 on CO and CO2. Surface Science, 2015, 631, 155-164.	0.8	11
11	Oxygen evolution on well-characterized mass-selected Ru and RuO₂nanoparticles. Chemical Science, 2015, 6, 190-196.	3.7	298
12	EC-STM study of the initial stages of the electrochemical Au(1 1 1)â€“Cd alloy formation. Surface Science, 2015, 632, 126-134.	0.8	8
13	CO₂ Electroreduction on Well-Defined Bimetallic Surfaces: Cu Overlayers on Pt(111) and Pt(211). Journal of Physical Chemistry C, 2013, 117, 20500-20508.	1.5	119
14	Study of underpotential deposited Cu layers on Pt(111) and their stability against CO and CO2 in perchloric acid. Physical Chemistry Chemical Physics, 2013, 15, 19659.	1.3	8
15	In-situ STM study of phosphate adsorption on Cu(111), Au(111) and Cu/Au(111) electrodes. Surface Science, 2013, 608, 44-54.	0.8	33
16	Low temperature methane oxidation on differently supported 2 nm Au nanoparticles. Gold Bulletin, 2009, 42, 13-19.	3.2	17
17	Combined spectroscopy and microscopy of supported MoS2 nanoparticles. Surface Science, 2009, 603, 1182-1189.	0.8	30
18	Oxidation of methane on nanoparticulate Au/TiO2 at low temperature: A combined microreactor and DFT study. Catalysis Today, 2009, 142, 24-29.	2.2	12

#	Article	IF	Citations
19	Structure sensitivity of the methanation reaction: H2-induced CO dissociation on nickel surfaces. Journal of Catalysis, 2008, 255, 6-19.	3.1	411
20	Oxidation of CO and H2 by O2 and N2O on Au/TiO2 catalysts in microreactors. Journal of Catalysis, 2008, 260, 86-92.	3.1	29
21	Role of Surface Elastic Relaxations in an O-Induced Nanopattern onPt(110)â^'(1Ã—2). Physical Review Letters, 2007, 98, 115501.	2.9	25
22	Identification of Active Edge Sites for Electrochemical H ₂ Evolution from MoS ₂ Nanocatalysts. Science, 2007, 317, 100-102.	6.0	5,149
23	Atomic structure of screw dislocations intersecting theAu(111)surface: A combined scanning tunneling microscopy and molecular dynamics study. Physical Review B, 2006, 74, .	1.1	18
24	Biomimetic Hydrogen Evolution: MoS2 Nanoparticles as Catalyst for Hydrogen Evolution. ChemInform, 2005, 36, no.	0.1	12
25	Does one-dimensional (1D) adatom and cluster diffusion of Pt on the Pt(110)-(1 Ã— 2) surface lead to 1D ripening?. New Journal of Physics, 2005, 7, 13-13.	1.2	7
26	Biomimetic Hydrogen Evolution:Â MoS2Nanoparticles as Catalyst for Hydrogen Evolution. Journal of the American Chemical Society, 2005, 127, 5308-5309.	6.6	3,497
27	Observations of reversible and irreversible structural transitions of cobalt on Si (111) with LEEM. Micron, 1999, 30, 13-20.	1.1	3
28	Enhancement of surface self-diffusion of platinum atoms by adsorbed hydrogen. Nature, 1999, 398, 134-136.	13.7	221
29	Oxygen adsorption on Pt(110)-(1Ã—2): new high-coverage structures. Surface Science, 1999, 430, L533-L539.	0.8	37
30	Determination of iodine adlayer structures on Au(111) by scanning tunneling microscopy. Journal of Chemical Physics, 1997, 107, 585-591.	1.2	38
31	Temperature dependence of the xenon-layer morphology on platinum (111) studied with scanning tunneling microscopy. Surface Science, 1995, 331-333, 908-912.	0.8	20
32	A scanning tunneling microscopy study of the adsorption of Xe on Pt(111) up to one monolayer. Applied Physics A: Materials Science and Processing, 1995, 60, 147-153.	1.1	35
33	Interaction of xenon at surface steps. Physical Review Letters, 1994, 73, 1259-1262.	2.9	57
34	An ultrahigh vacuum scanning tunneling microscope for use at variable temperature from 10 to 400 K. Review of Scientific Instruments, 1994, 65, 3204-3210.	0.6	36
35	Field emission from atomic size sources. Journal of Applied Physics, 1993, 74, 3652-3657.	1.1	27
36	The electrified Cu/aqueous interface under alkaline conditions: Converging experiment and theory via kinetics. , 0, , .		0