Clemens Barth

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9216528/publications.pdf

Version: 2024-02-01

57 papers	2,375 citations	201575 27 h-index	197736 49 g-index
58 all docs	58 docs citations	58 times ranked	2014 citing authors

#	Article	IF	Citations
1	High-temperature oxidation and reduction of the inverse ceria/Cu(111) catalyst characterized by LEED, STM, nc-AFM and KPFM. Journal of Physics Condensed Matter, 2021, 34, .	0.7	2
2	Collective amplification of nearby nanoparticles in the Coulomb blockade restricted charging of a single nanoparticle. New Journal of Physics, 2021, 23, 123009.	1.2	1
3	Oxygen Adsorption on Graphene-Encapsulated Palladium Nanoparticles Imaged by Kelvin Probe Force Microscopy. Journal of Physical Chemistry C, 2019, 123, 24615-24625.	1.5	6
4	Revealing Carbon Phenomena at Palladium Nanoparticles by Analyzing the Work Function. Journal of Physical Chemistry C, 2019, 123, 4360-4370.	1.5	15
5	Carbon Precursor Structures and Graphene on Palladium Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 522-529.	1.5	9
6	Stability of Ultrathin Ceria Films on Pt(111) Exposed to Air and Treated in Redox Cycles. Journal of Physical Chemistry C, 2018, 122, 25954-25963.	1.5	15
7	CO Chemisorption on Ultrathin MgO-Supported Palladium Nanoparticles. Journal of Physical Chemistry C, 2017, 121, 5551-5564.	1.5	17
8	Surface Stabilizes Ceria in Unexpected Stoichiometry. Journal of Physical Chemistry C, 2017, 121, 6844-6851.	1.5	40
9	A perfectly stoichiometric and flat CeO2(111) surface on a bulk-like ceria film. Scientific Reports, 2016, 6, 21165.	1.6	47
10	Charging C60 islands with the AFM tip. Nanoscale, 2016, 8, 411-419.	2.8	7
11	KCl ultra-thin films with polar and non-polar surfaces grown on Si(111)7 Ã— 7. Scientific Reports, 2015, 5, 8223.	1.6	10
12	Manipulation of Metal Nanoparticles on Insulating Surfaces. Advances in Atom and Single Molecule Machines, 2015, , 93-110.	0.0	0
13	Morphology, Work Function, and Silver Ad-Structures of High-Temperature Grown Ultrathin MgO Films on Ag(001). Journal of Physical Chemistry C, 2015, 119, 23990-23995.	1.5	5
14	Defects on Bulk MgO(001) Imaged by nc-AFM. Springer Series in Surface Sciences, 2015, , 215-239.	0.3	3
15	Mechanisms of the Adsorption and Self-Assembly of Molecules with Polarized Functional Groups on Insulating Surfaces. Journal of Physical Chemistry C, 2014, 118, 14569-14578.	1.5	28
16	Kelvin Probe Force Microscopy in Surface Chemistry: Reactivity of Pd Nanoparticles on Highly Oriented Pirolytic Graphite. ACS Catalysis, 2014, 4, 1838-1844.	5.5	29
17	Defect mediated manipulation of nanoclusters on an insulator. Scientific Reports, 2013, 3, 1270.	1.6	14
18	Atomic Structures of Silicene Layers Grown on Ag(111): Scanning Tunneling Microscopy and Noncontact Atomic Force Microscopy Observations. Scientific Reports, 2013, 3, 2399.	1.6	137

#	Article	IF	Citations
19	Thin NaCl films on silver (001): island growth and work function. New Journal of Physics, 2012, 14, 103037.	1.2	32
20	Characterization of atomic step structures on CaF₂(111) by their electric potential. Applied Physics Letters, 2012, 101, 051601.	1.5	18
21	Bimetallic Nanoparticles, Grown Under UHV on Insulators, Studied by Scanning Probe Microscopy. Engineering Materials, 2012, , 25-68.	0.3	1
22	Twoâ€Ðimensional Nanostructured Growth of Nanoclusters and Molecules on Insulating Surfaces. Advanced Materials, 2012, 24, 3228-3232.	11.1	22
23	Surfaces: Two-Dimensional Nanostructured Growth of Nanoclusters and Molecules on Insulating Surfaces (Adv. Mater. 24/2012). Advanced Materials, 2012, 24, 3146-3146.	11.1	1
24	Characterization of Thin MgO Films on Ag(001) by Low-Energy Electron Diffraction and Scanning Tunneling Microscopy. Journal of Physical Chemistry C, 2011, 115, 8034-8041.	1.5	25
25	Polarized Tips or Surfaces: Consequences in Kelvin Probe Force Microscopy. E-Journal of Surface Science and Nanotechnology, 2011, 9, 6-14.	0.1	20
26	Recent Trends in Surface Characterization and Chemistry with Highâ€Resolution Scanning Force Methods. Advanced Materials, 2011, 23, 477-501.	11.1	214
27	Ultrathin magnesia films as support for molecules and metal clusters: Tuning reactivity by thickness and composition. Physica Status Solidi (B): Basic Research, 2010, 247, 1001-1015.	0.7	3
28	TEM-assisted dynamic scanning force microscope imaging of (001) antigorite: Surfaces and steps on a modulated silicate. American Mineralogist, 2010, 95, 673-685.	0.9	8
29	AFM tip characterization by Kelvin probe force microscopy. New Journal of Physics, 2010, 12, 093024.	1.2	45
30	Topography and work function measurements of thin MgO(001) films on Ag(001) by nc-AFM and KPFM. Physical Chemistry Chemical Physics, 2010, 12, 3203.	1.3	75
31	Chemical Identification of Ions in Doped NaCl by Scanning Force Microscopy. Physical Review Letters, 2009, 102, 256103.	2.9	21
32	NaCl(001) surfaces nanostructured by Suzuki precipitates: a scanning force microscopy study. New Journal of Physics, 2009, 11, 043003.	1.2	13
33	Expeditive Syntheses of Functionalized Pentahelicenes and NC-AFM on Ag(001). Organic Letters, 2009, 11, 3846-3849.	2.4	49
34	Kelvin Probe Force Microscopy on MgO(001) Surfaces and Supported Pd Nanoclusters. Journal of Physical Chemistry C, 2009, 113, 247-253.	1.5	42
35	Preparation of regular arrays of bimetallic clusters with independent control of size and chemical composition. Faraday Discussions, 2008, 138, 407-420.	1.6	25
36	Imaging the real shape of nanoclusters in scanning force microscopy. Journal of Applied Physics, 2008, 103, 054313.	1.1	31

#	Article	IF	Citations
37	Imaging Suzuki Precipitates onNaCl:Mg2+(001)by Scanning Force Microscopy. Physical Review Letters, 2008, 100, 096101.	2.9	21
38	Surface Double Layer on (001) Surfaces of Alkali Halide Crystals: A Scanning Force Microscopy Study. Physical Review Letters, 2007, 98, 136804.	2.9	62
39	Kelvin probe force microscopy on surfaces of UHV cleaved ionic crystals. Nanotechnology, 2006, 17, S155-S161.	1.3	64
40	High-resolution scanning force microscopy of gold nanoclusters on the KBr (001) surface. Physical Review B, 2006, 73, .	1.1	36
41	Gold nanoclusters on alkali halide surfaces: Charging and tunneling. Applied Physics Letters, 2006, 89, 252119.	1.5	37
42	Imaging nanoclusters in theconstant height modeof the dynamic SFM. Nanotechnology, 2006, 17, S128-S136.	1.3	33
43	Surface Structure of an Ultrathin Alumina Film onNi3Al(111): A Dynamic Scanning Force Microscopy Study. Physical Review Letters, 2006, 97, 126106.	2.9	60
44	Surface preparation of hard ionic crystals by ultrahigh vacuum cleavage. Review of Scientific Instruments, 2005, 76, 083907.	0.6	45
45	Measuring Site-Specific Clusterâ^'Surface Bond Formation. Journal of the American Chemical Society, 2005, 127, 17863-17866.	6.6	29
46	High-resolution imaging of gold clusters on KBr(001) surfaces investigated by dynamic scanning force microscopy. Nanotechnology, 2004, 15, 1264-1272.	1.3	36
47	Cleaved surfaces of d-AlNiCo and Î¾â€²-AlPdMn. Journal of Non-Crystalline Solids, 2004, 334-335, 491-494.	1.5	6
48	Atomic Resolution Imaging of the (001) Surface of UHV Cleaved MgO by Dynamic Scanning Force Microscopy. Physical Review Letters, 2003, 91, 196102.	2.9	150
49	Role of tip structure and surface relaxation in atomic resolution dynamic force microscopy:CaF2(111)as a reference surface. Physical Review B, 2002, 66, .	1.1	79
50	Contrast Mechanisms on Insulating Surfaces. Nanoscience and Technology, 2002, , 305-347.	1.5	2
51	Atomic Structure, Order and Disorder on High Temperature Reconstructed Î±-Al2O3(0001). Nanoscience and Technology, 2002, , 135-145.	1.5	1
52	Contrast formation in atomic resolution scanning force microscopy on CaF2(111): experiment and theory. Journal of Physics Condensed Matter, 2001, 13, 2061-2079.	0.7	93
53	Imaging the atomic arrangements on the high-temperature reconstructed Î±-Al2O3(0001) surface. Nature, 2001, 414, 54-57.	13.7	278
54	Unambiguous Interpretation of Atomically Resolved Force Microscopy Images of an Insulator. Physical Review Letters, 2001, 86, 2373-2376.	2.9	156

#	Article	IF	Citations
55	Resolving ions and vacancies at step edges on insulating surfaces. Surface Science, 2000, 470, L99-L103.	0.8	27
56	Scanning Force Imaging of Atomic Size Defects on theCaF2(111)Surface. Physical Review Letters, 1999, 83, 768-771.	2.9	96
57	Degradation of the CaF2(111) surface by air exposure. Surface Science, 1999, 439, 181-190.	0.8	32