Hubertus, Marbach

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3345127/publications.pdf

Version: 2024-02-01

99 papers	3,019 citations	136950 32 h-index	182427 51 g-index
104 all docs	104 docs citations	104 times ranked	2259 citing authors

#	Article	IF	Citations
1	On the adsorption of different tetranaphthylporphyrins on Cu(111) and Ag(111). Surface Science, 2022, 720, 122047.	1.9	4
2	Nanoscale Ruthenium-Containing Deposits from Ru(CO)₄I₂ via Simultaneous Focused Electron Beam-Induced Deposition and Etching in Ultrahigh Vacuum: Mask Repair in Extreme Ultraviolet Lithography and Beyond. ACS Applied Nano Materials, 2022, 5, 3855-3865.	5.0	2
3	Metalation of 2HTCNPP on Ag(111) with Zn: Evidence for the Sitting atop Complex at Room Temperature. ChemPhysChem, 2021, 22, 396-403.	2.1	6
4	Self-Assembled 2D-Coordination Kagome, Quadratic, and Close-Packed Hexagonal Lattices Formed from a Cyano-Functionalized Benzoporphyrin on Cu(111). Journal of Physical Chemistry C, 2021, 125, 7204-7212.	3.1	5
5	Exploring the fabrication and transfer mechanism of metallic nanostructures on carbon nanomembranes via focused electron beam induced processing. Beilstein Journal of Nanotechnology, 2021, 12, 319-329.	2.8	0
6	Low Energy Electron- and Ion-Induced Surface Reactions of Fe(CO)₅ Thin Films. Journal of Physical Chemistry C, 2021, 125, 17749-17760.	3.1	10
7	Conformation Controls Mobility: 2Hâ€Tetranaphthylporphyrins on Cu(111). ChemPhysChem, 2020, 21, 423-427.	2.1	4
8	Controlled Electronâ€Induced Fabrication of Metallic Nanostructures on 1 nm Thick Membranes. Small, 2020, 16, e2003947.	10.0	7
9	Surface Reactions of Low-Energy Argon Ions with Organometallic Precursors. Journal of Physical Chemistry C, 2020, 124, 24795-24808.	3.1	7
10	Ultrathin Carbon Nanomembranes from 5,10,15,20-Tetraphenylporphyrin: Electron Beam Induced Fabrication and Functionalization via Focused Electron Beam Induced Processing. Journal of Physical Chemistry C, 2020, 124, 28335-28344.	3.1	2
11	Formation of Highly Ordered Molecular Porous 2D Networks from Cyanoâ€Functionalized Porphyrins on Cu(111). Chemistry - A European Journal, 2020, 26, 13408-13418.	3.3	12
12	Cyano-Functionalized Porphyrins on Cu(111) from One-Dimensional Wires to Two-Dimensional Molecular Frameworks: On the Role of Co-Deposited Metal Atoms. Chemistry of Materials, 2020, 32, 2114-2122.	6.7	14
13	Fossil biomass preserved as graphitic carbon in a late Paleoproterozoic banded iron formation metamorphosed at more than 550Â°C. Journal of the Geological Society, 2019, 176, 651-668.	2.1	5
14	Kontrolle der Selbstmetallierungsrate von Tetraphenylporphyrinen auf Cu(111) durch Funktionalisierung mit Cyangruppen. Angewandte Chemie, 2018, 130, 10230-10236.	2.0	8
15	Controlling the Selfâ€Metalation Rate of Tetraphenylporphyrins on Cu(111) via Cyano Functionalization. Angewandte Chemie - International Edition, 2018, 57, 10074-10079.	13.8	24
16	Surface-Anchored Metalâ€“Organic Frameworks as Versatile Resists for Gas-Assisted E-Beam Lithography: Fabrication of Sub-10 Nanometer Structures. ACS Nano, 2018, 12, 3825-3835.	14.6	36
17	Frontispiz: Kontrolle der Selbstmetallierungsrate von Tetraphenylporphyrinen auf Cu(111) durch Funktionalisierung mit Cyangruppen. Angewandte Chemie, 2018, 130, .	2.0	0
18	Frontispiece: Controlling the Self-Metalation Rate of Tetraphenylporphyrins on Cu(111) via Cyano Functionalization. Angewandte Chemie - International Edition, 2018, 57, .	13.8	0

#	Article	IF	Citations
19	Focused Soft X-Ray Beam Induced Deposition: Recent Advances to a Novel Approach for Fabrication of Metallic Nanostructures. Microscopy and Microanalysis, 2018, 24, 116-117.	0.4	2
20	Electron Beam-Induced Surface Activation of Metalâ€“Organic Framework HKUST-1: Unraveling the Underlying Chemistry. Journal of Physical Chemistry C, 2018, 122, 26658-26670.	3.1	16
21	Metalation and coordination reactions of 2H-meso-trans-di(p-cyanophenyl)porphyrin on Ag(111) with coadsorbed cobalt atoms. Physical Chemistry Chemical Physics, 2018, 20, 25062-25068.	2.8	6
22	Chemistry for electron-induced nanofabrication. Beilstein Journal of Nanotechnology, 2018, 9, 1317-1320.	2.8	7
23	Exploring the fabrication of Co and Mn nanostructures with focused soft x-ray beam induced deposition. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 031601.	1.2	7
24	On the Principles of Tweaking Nanostructure Fabrication via Focused Electron Beam Induced Processing Combined with Catalytic Growth Processes. Small Methods, 2017, 1, 1700095.	8.6	9
25	Focused electron beam based direct-write fabrication of graphene and amorphous carbon from oxo-functionalized graphene on silicon dioxide. Physical Chemistry Chemical Physics, 2017, 19, 2683-2686.	2.8	3
26	Adsorption Behavior of a Cyano-Functionalized Porphyrin on Cu(111) and Ag(111): From Molecular Wires to Ordered Supramolecular Two-Dimensional Aggregates. Journal of Physical Chemistry C, 2017, 121, 26361-26371.	3.1	29
27	On the critical role of the substrate: the adsorption behaviour of tetrabenzoporphyrins on different metal surfaces. Physical Chemistry Chemical Physics, 2017, 19, 20281-20289.	2.8	13
28	â€œInvertedâ€•porphyrins: a distorted adsorption geometry of free-base porphyrins on Cu(111). Chemical Communications, 2017, 53, 8207-8210.	4.1	38
29	Localized growth of carbon nanotubes via lithographic fabrication of metallic deposits. Beilstein Journal of Nanotechnology, 2017, 8, 2592-2605.	2.8	3
30	Reversible thermally induced phase transition in ordered domains of Co(II)-5,10,15,20-tetrakis-(3,5-di-tert-butylphenyl)-porphyrin on Cu(111). Surface Science, 2016, 650, 255-262.	1.9	1
31	On the magnetic properties of iron nanostructures fabricated via focused electron beam induced deposition and autocatalytic growth processes. Nanotechnology, 2016, 27, 355302.	2.6	10
32	Additive fabrication of nanostructures with focused soft X-rays. RSC Advances, 2016, 6, 98344-98349.	3.6	8
33	Hungry Porphyrins: Protonation and Selfâ€Metalation of Tetraphenylporphyrin on TiO₂(110) â€•1 Ã— 1. ChemistrySelect, 2016, 1, 6103-6105.	1.5	30
34	2Hâ€Tetrakis(3,5â€diâ€tertâ€butyl)phenylporphyrin on a Cu(110) Surface: Roomâ€Temperature Selfâ€Metalation and Surfaceâ€Reconstructionâ€Facilitated Selfâ€Assembly. Chemistry - A European Journal, 2016, 22, 3347-3354.	3.3	6
35	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:mo>/</mml:mo><mml:mi>Mo</mml:mi><mml:mo>(</mml:mo><mml:mn>110</mml:mn><mml:mo>)</mml:mo></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:mo>/</mml:mo><mml:mi>Mo</mml:mi><mml:mo>(</mml:mo><mml:mn>100</mml:mn><mml:mo>)</mml:mo></mml:mrow></mml:math> surfaces: A high-resolu. Physical Review B, 2015, 92, .	3.2	7
36	Supramolecular order and structural dynamics: A STM study of 2H-tetraphenylporphycene on Cu(111). Journal of Chemical Physics, 2015, 142, 101925.	3.0	3

#	Article	IF	Citations
37	Regionâ€Selective Deposition of Coreâ€“Shell Nanoparticles for 3â€‰D Hierarchical Assemblies by the Huisgen 1,3â€Dipolar Cycloaddition. Angewandte Chemie - International Edition, 2015, 54, 9235-9238.	13.8	19
38	Self-assembly and coverage dependent thermally induced conformational changes of Ni(<scp>ii</scp>)-meso-tetrakis (4-tert-butylphenyl) benzoporphyrin on Cu(111). Physical Chemistry Chemical Physics, 2015, 17, 13066-13073.	2.8	16
39	Role of Specific Intermolecular Interactions for the Arrangement of Ni(II)-5, 10, 15, 20-Tetraphenyltetrabenzoporphyrin on Cu(111). Journal of Physical Chemistry C, 2015, 119, 19897-19905.	3.1	16
40	Surface-Mediated in Situ Metalation of Porphyrins at the Solidâ€“Vacuum Interface. Accounts of Chemical Research, 2015, 48, 2649-2658.	15.6	114
41	Electron-beam induced deposition and autocatalytic decomposition of Co(CO)₃NO. Beilstein Journal of Nanotechnology, 2014, 5, 1175-1185.	2.8	23
42	Insights in Reaction Mechanistics: Isotopic Exchange during the Metalation of Deuterated Tetraphenyl-21,23D-porphyrin on Cu(111). Journal of Physical Chemistry C, 2014, 118, 26729-26736.	3.1	47
43	Coverageâ€and Temperatureâ€Dependent Metalation and Dehydrogenation of Tetraphenylporphyrin on Cu(111). Chemistry - A European Journal, 2014, 20, 8948-8953.	3.3	19
44	Electron beam induced surface activation: a method for the lithographic fabrication of nanostructures via catalytic processes. Applied Physics A: Materials Science and Processing, 2014, 117, 987-995.	2.3	23
45	O₂ adsorption dependent photoluminescence emission from metal oxide nanoparticles. Physical Chemistry Chemical Physics, 2014, 16, 23922-23929.	2.8	38
46	Studying the dynamic behaviour of porphyrins as prototype functional molecules by scanning tunnelling microscopy close to room temperature. Chemical Communications, 2014, 50, 9034-9048.	4.1	54
47	Massive conformational changes during thermally induced self-metalation of 2H-tetrakis-(3,5-di-tert-butyl)-phenylporphyrin on Cu(111). Chemical Communications, 2014, 50, 10225-10228.	4.1	27
48	Abrupt Coverage-Induced Enhancement of the Self-Metalation of Tetraphenylporphyrin with Cu(111). Journal of Physical Chemistry C, 2014, 118, 1661-1667.	3.1	51
49	On the Energetics of Conformational Switching of Molecules at and Close to Room Temperature. Journal of the American Chemical Society, 2014, 136, 1609-1616.	13.7	40
50	Electron Beam-Induced Writing of Nanoscale Iron Wires on a Functional Metal Oxide. Journal of Physical Chemistry C, 2013, 117, 17674-17679.	3.1	23
51	Towards the engineering of molecular nanostructures: local anchoring and functionalization of porphyrins on model-templates. Nanotechnology, 2013, 24, 115305.	2.6	19
52	Coverage Dependent Disorderâ€“Order Transition of 2H-Tetraphenylporphyrin on Cu(111). Langmuir, 2013, 29, 4104-4110.	3.5	33
53	Electron Beam Induced Surface Activation of Ultrathin Porphyrin Layers on Ag(111). Langmuir, 2013, 29, 12290-12297.	3.5	15
54	Thin membranes versus bulk substrates: investigation of proximity effects in focused electron beam-induced processing. Journal Physics D: Applied Physics, 2012, 45, 225306.	2.8	11

#	Article	IF	Citations
55	Investigation of proximity effects in electron microscopy and lithography. Applied Physics Letters, 2012, 100, .	3.3	21
56	Defects in Oxygen-Depleted Titanate Nanostructures. Langmuir, 2012, 28, 7851-7858.	3.5	16
57	Temperature-Dependent Chemical and Structural Transformations from 2H-tetraphenylporphyrin to Copper(II)-Tetraphenylporphyrin on Cu(111). Journal of Physical Chemistry C, 2012, 116, 12275-12282.	3.1	68
58	Activation Energy for the Selfâ€Metalation Reaction of 2Hâ€Tetraphenylporphyrin on Cu(111). Angewandte Chemie - International Edition, 2012, 51, 10898-10901.	13.8	68
59	Diffusion, Rotation, and Surface Chemical Bond of Individual 2H-Tetraphenylporphyrin Molecules on Cu(111). Journal of Physical Chemistry C, 2011, 115, 24172-24177.	3.1	74
60	Generation of clean iron nanocrystals on an ultra-thin SiOx film on Si(001). Physical Chemistry Chemical Physics, 2011, 13, 17333.	2.8	22
61	Methylated [(arene)(1,3-cyclohexadiene)Ru(0)] complexes as low-melting MOCVD precursor complexes with a controlled follow-up chemistry of the ligands. Journal of Materials Chemistry, 2011, 21, 3014.	6.7	10
62	Methylated [(benzene)(1,3â€butadiene)Ru⁰] Derivatives as Novel MOCVD Precursors with Favorable Properties. Chemical Vapor Deposition, 2011, 17, 15-21.	1.3	8
63	Substrateâ€Mediated Phase Separation of Two Porphyrin Derivatives on Cu(111). Chemistry - A European Journal, 2011, 17, 10226-10229.	3.3	50
64	Fabrication of layered nanostructures by successive electron beam induced deposition with two precursors: protective capping of metallic iron structures. Nanotechnology, 2011, 22, 475304.	2.6	8
65	Electron-beam-induced deposition and post-treatment processes to locally generate clean titanium oxide nanostructures on Si(100). Nanotechnology, 2011, 22, 085301.	2.6	17
66	Magnetotransport properties of iron microwires fabricated by focused electron beam induced autocatalytic growth. Journal Physics D: Applied Physics, 2011, 44, 425001.	2.8	22
67	[cisâ€(1,3â€Diene)₂W(CO)₂] Complexes as MOCVD Precursors for the Deposition of Thin Tungsten â€“ Tungsten Carbide Films. Chemical Vapor Deposition, 2010, 16, 239-247.	1.3	4
68	Electrons as â€œInvisible Inkâ€: Fabrication of Nanostructures by Local Electron Beam Induced Activation of SiO_x. Angewandte Chemie - International Edition, 2010, 49, 4669-4673.	13.8	71
69	Ordering aspects and intramolecular conformation of tetraphenylporphyrins on Ag(111). Physical Chemistry Chemical Physics, 2010, 12, 13082.	2.8	102
70	NO-Induced Reorganization of Porphyrin Arrays. ACS Nano, 2009, 3, 1789-1794.	14.6	43
71	Adsorption of cobalt (II) octaethylporphyrin and 2H-octaethylporphyrin on Ag(111): new insight into the surface coordinative bond. New Journal of Physics, 2009, 11, 125004.	2.9	73
72	Modification of the Growth of Iron on Ag(111) by Predeposited Organic Monolayers. Zeitschrift Fur Physikalische Chemie, 2009, 223, 131-144.	2.8	21

#	Article	IF	Citations
73	Generation of Clean Iron Structures by Electron-Beam-Induced Deposition and Selective Catalytic Decomposition of Iron Pentacarbonyl on Rh(110). Langmuir, 2009, 25, 11930-11939.	3.5	37
74	Chemical Fingerprints of Large Organic Molecules in Scanning Tunneling Microscopy: Imaging Adsorbateâ^'Substrate Coupling of Metalloporphyrins. Journal of Physical Chemistry C, 2009, 113, 16450-16457.	3.1	61
75	Surface-Confined Coordination Chemistry with Porphyrins and Phthalocyanines: Aspects of Formation, Electronic Structure, and Reactivity. Zeitschrift Fur Physikalische Chemie, 2009, 223, 53-74.	2.8	89
76	Electronâ€Beamâ€Induced Deposition in Ultrahigh Vacuum: Lithographic Fabrication of Clean Iron Nanostructures. Small, 2008, 4, 841-846.	10.0	94
77	Direct Metalation of a Phthalocyanine Monolayer on Ag(111) with Coadsorbed Iron Atoms. Journal of Physical Chemistry C, 2008, 112, 6087-6092.	3.1	128
78	Coordination of Iron Atoms by Tetraphenylporphyrin Monolayers and Multilayers on Ag(111) and Formation of Iron-Tetraphenylporphyrin. Journal of Physical Chemistry C, 2008, 112, 15458-15465.	3.1	147
79	Understanding the Contrast Mechanism in Scanning Tunneling Microscopy (STM) Images of an Intermixed Tetraphenylporphyrin Layer on Ag(111). Langmuir, 2008, 24, 1897-1901.	3.5	62
80	The Effect of Coadsorbed Oxygen on the Adsorption and Diffusion of Potassium on Rh(110):â€‰ A First-Principles Study. Journal of Physical Chemistry C, 2007, 111, 7446-7455.	3.1	12
81	Polymorphism of Porphyrin Molecules on Ag(111) and How to Weave a Rigid Monolayer. Journal of Physical Chemistry C, 2007, 111, 13531-13538.	3.1	56
82	Principle and Mechanism of Direct Porphyrin Metalation:â€‰ Joint Experimental and Theoretical Investigation. Journal of the American Chemical Society, 2007, 129, 9476-9483.	13.7	167
83	Microscopic Evidence of the Metalation of a Free-Base Porphyrin Monolayer with Iron. ChemPhysChem, 2007, 8, 241-243.	2.1	95
84	K and mixed K+O adlayers on Rh(110). Journal of Chemical Physics, 2006, 124, 014706.	3.0	15
85	Development and performance of the nanoworkbench: A four tip STM for conductivity measurements down to submicrometer scales. Review of Scientific Instruments, 2005, 76, 045107.	1.3	42
86	Promoter-Induced Reactive Phase Separation in Surface Reactions. Physical Review Letters, 2004, 92, 198305.	7.8	57
87	Electron-beam-induced deposition of carbon films on Si(100) using chemisorbed ethylene as a precursor molecule. Surface Science, 2004, 571, 128-138.	1.9	31
88	Mass transport of alkali metal with pulses: catalytic NO reduction with hydrogen on Rh(110)/K. Chemical Physics Letters, 2004, 395, 64-69.	2.6	13
89	Mathematical Modeling of Reactive Phase Separation in the System Rh(110)/K/O2+ H2â€. Journal of Physical Chemistry B, 2004, 108, 14620-14626.	2.6	16
90	Photoelectron Spectromicroscopy of Potassium Redistribution in the O2 + H2 Reaction on Rh(110). Journal of Physical Chemistry B, 2004, 108, 15182-15191.	2.6	10

#	Article	IF	Citations
91	Metastable impact electron emission microscopy of the catalytic H2 oxidation on Rh(). Surface Science, 2003, 532-535, 132-136.	1.9	10
92	Ordered phases in alkali redistribution during a catalytic surface reaction. Physical Chemistry Chemical Physics, 2003, 5, 2730-2735.	2.8	32
93	Core level spectroscopy and reactivity of coadsorbed K+O layers on reconstructed Rh(110) surfaces. Journal of Chemical Physics, 2003, 119, 12503-12509.	3.0	12
94	On the origin of stationary concentration patterns in the H2+O2 reaction on a microstructured Rh(110)/Pt surface with potassium. Journal of Chemical Physics, 2002, 117, 2923-2933.	3.0	15
95	DIRECTIONAL TRANSPORT OF K ON CATALYTIC METAL SURFACES. Surface Review and Letters, 2002, 09, 751-758.	1.1	11
96	Mass transport of alkali metal in reaction fronts on a catalytic metal surface. Chemical Physics Letters, 2002, 364, 207-212.	2.6	23
97	Selforganization of Alkali Metal on a Catalytic Metal Surface. Catalysis Letters, 2002, 83, 161-164.	2.6	34
98	Spatial variations of the interface composition during surface chemical reactions. Journal of Electron Spectroscopy and Related Phenomena, 2001, 114-116, 989-996.	1.7	11
99	Photoelectron spectromicroscopy of electrochemically induced oxygen spillover at the Pt/YSZ interface. Chemical Physics Letters, 2000, 316, 331-335.	2.6	51