

Mats A GÃthelid

List of Publications by Year in descending order

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123
papers

2,541
citations

186209

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124
all docs

124
docs citations

124
times ranked

3122
citing authors

#	ARTICLE	IF	CITATIONS
1	The nature of self-assembled octadecylphosphonic acid (ODPA) layers on copper substrates. Journal of Colloid and Interface Science, 2021, 581, 816-825.	5.0	10
2	CO Oxidation Efficiency and Hysteresis Behavior over Mesoporous Pd/SiO ₂ Catalyst. Catalysts, 2021, 11, 131.	1.6	17
3	Highly crystalline MAPbI ₃ perovskite grain formation by irreversible poor-solvent diffusion aggregation, for efficient solar cell fabrication. Nano Energy, 2020, 78, 105346.	8.2	19
4	Adsorption and Decomposition of Ethanol on Cu ₂ O(111) and (100). Journal of Physical Chemistry C, 2019, 123, 20384-20392.	1.5	11
5	Investigation of the surface species during temperature dependent dehydrogenation of naphthalene on Ni(111). Journal of Chemical Physics, 2019, 150, 244704.	1.2	3
6	Miniature CoCr laser welds under cyclic shear: Fatigue evolution and crack growth. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 99, 93-103.	1.5	3
7	Automatization and stress analysis data of CoCr laser weld fatigue tests. Data in Brief, 2019, 26, 104374.	0.5	0
8	Structure dependent effect of silicon on the oxidation of Al(111) and Al(100). Surface Science, 2019, 684, 1-11.	0.8	2
9	Electrochemical Performance and in Operando Charge Efficiency Measurements of Cu/Sn-Doped Nano Iron Electrodes. Batteries, 2019, 5, 1.	2.1	29
10	Se ¹³⁷ C Cleavage of Hexane Selenol at Steps on Au(111). Langmuir, 2018, 34, 2630-2636.	1.6	2
11	NiFeOx as a Bifunctional Electrocatalyst for Oxygen Reduction (OR) and Evolution (OE) Reaction in Alkaline Media. Catalysts, 2018, 8, 328.	1.6	25
12	Interaction of Sulfur Dioxide and Near-Ambient Pressures of Water Vapor with Cuprous Oxide Surfaces. Journal of Physical Chemistry C, 2017, 121, 24011-24024.	1.5	11
13	Naphthalene on Ni(111): Experimental and Theoretical Insights into Adsorption, Dehydrogenation, and Carbon Passivation. Journal of Physical Chemistry C, 2017, 121, 22199-22207.	1.5	13
14	Hexane selenol dissociation on Cu: The protective role of oxide and water. Applied Surface Science, 2017, 423, 716-720.	3.1	4
15	Dehydrogenation of methanol on Cu ₂ O(100) and (111). Journal of Chemical Physics, 2017, 146, 244702.	1.2	23
16	In-situ evaluation of dye adsorption on TiO ₂ using QCM. EPJ Photovoltaics, 2017, 8, 80401.	0.8	0
17	From Quantum Dots to Micro Crystals: Organolead Triiodide Perovskite Crystal Growth from Isopropanol Solution. ECS Journal of Solid State Science and Technology, 2016, 5, P614-P620.	0.9	6
18	Mixed monolayers of alkane thiols with polar terminal group on gold: Investigation of structure dependent surface properties. Journal of Colloid and Interface Science, 2016, 484, 279-290.	5.0	13

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19	Stoichiometry of the ALD-Al ₂ O ₃ /4H ⁺ SiC interface by synchrotron-based XPS. Journal Physics D: Applied Physics, 2016, 49, 255308.	1.3	13
20	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.	3.1	3
21	Reactivity at the Cu ₂ O(100):Cu ⁺ H ₂ O interface: a combined DFT and PES study. Physical Chemistry Chemical Physics, 2016, 18, 30570-30584.	1.3	21
22	The Surface Structure of Cu ₂ O(100). Journal of Physical Chemistry C, 2016, 120, 4373-4381.	1.5	46
23	The thickness of native oxides on aluminum alloys and single crystals. Applied Surface Science, 2015, 349, 826-832.	3.1	174
24	Site-dependent charge transfer at the Pt(111)-ZnPc interface and the effect of iodine. Journal of Chemical Physics, 2014, 140, 174702.	1.2	13
25	Self-Assembled Monolayers as Inhibitors for the Atmospheric Corrosion of Copper Induced by Formic Acid: A Comparison between Hexanethiol and Hexaneselenol. Journal of the Electrochemical Society, 2014, 161, C50-C56.	1.3	25
26	Studies on the adsorption of chromium(VI) onto 3-Mercaptopropionic acid coated superparamagnetic iron oxide nanoparticles. Journal of Colloid and Interface Science, 2014, 425, 36-43.	5.0	87
27	Formation and nitridation of InGa composite droplets on Si(111): In-situ study by high resolution X-ray photoelectron spectroscopy. Applied Surface Science, 2014, 303, 297-305.	3.1	0
28	Role of Defects in Surface Chemistry on Cu ₂ O(111). Journal of Physical Chemistry C, 2013, 117, 19357-19364.	1.5	52
29	Photoemission and low energy electron microscopy study on the formation and nitridation of indium droplets on Si (111)7 \times 7 surfaces. Thin Solid Films, 2013, 531, 61-69.	0.8	4
30	Study of spatial homogeneity and nitridation of an Al nanopattern template with spectroscopic photoemission and low energy electron microscopy. Applied Surface Science, 2013, 264, 349-357.	3.1	5
31	SO ₂ interaction with Zn(0001) and ZnO(0001) and the influence of water. Surface Science, 2013, 608, 31-43.	0.8	15
32	Inhomogeneous charge transfer within monolayer zinc phthalocyanine absorbed on TiO ₂ (110). Journal of Chemical Physics, 2012, 136, 154703.	1.2	25
33	Photoluminescence and photoresponse from InSb/InAs-based quantum dot structures. Optics Express, 2012, 20, 21264.	1.7	14
34	Multifunctional silicon inspired by a wing of male Papilio ulyse. Applied Physics Letters, 2012, 100, 033109.	1.5	3
35	Surface concentration dependent structures of iodine on Pd(110). Journal of Chemical Physics, 2012, 137, 204703.	1.2	9
36	A micro-spectroscopy study on the influence of chemical residues from nanofabrication on the nitridation chemistry of Al nanopatterns. Applied Surface Science, 2012, 258, 4497-4506.	3.1	3

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37	Light-induced rearrangements of chemisorbed dyes on anatase(101). Physical Chemistry Chemical Physics, 2012, 14, 10780.	1.3	18
38	Crystallization-Induced Charge-Transfer Change in TiOPc Thin Films Revealed by Resonant Photoemission Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 14969-14977.	1.5	11
39	The effect of hard nitridation on Al ₂ O ₃ using a radio frequency operated plasma cell. Thin Solid Films, 2011, 519, 7796-7802.	0.8	3
40	Room temperature deposition of self-assembled Al nanoclusters on stepped sapphire (0001) surface and subsequent nitridation. Thin Solid Films, 2011, 520, 64-73.	0.8	3
41	Correlated development of a (2 Å ⁻²) reconstruction and a charge accumulation layer on the InAs(111)â€Bi surface. Surface Science, 2011, 605, 12-17.	0.8	7
42	High-resolution X-ray photoemission spectroscopy study of AlN nano-columns grown by nitridation of Al nano-squares on Si(111) substrates with ammonia. Thin Solid Films, 2010, 518, 3632-3639.	0.8	5
43	Water Adsorption on ZnO(0001): Transition from Triangular Surface Structures to a Disordered Hydroxyl Terminated phase. Journal of Physical Chemistry C, 2010, 114, 11157-11161.	1.5	93
44	4-tert-Butyl Pyridine Bond Site and Band Bending on TiO ₂ (110). Journal of Physical Chemistry C, 2010, 114, 2315-2320.	1.5	40
45	Adsorption geometry, molecular interaction, and charge transfer of triphenylamine-based dye on rutile TiO ₂ (110). Journal of Chemical Physics, 2010, 133, 224704.	1.2	28
46	Electronic structure of bismuth terminated InAs(100). Surface Science, 2009, 603, 190-196.	0.8	9
47	Investigation on the role of indium in the removal of metallic gallium from soft and hard sputtered GaN (0001) surfaces. Thin Solid Films, 2009, 517, 6023-6026.	0.8	2
48	Atomic structure of Cu ₂ O(111). Surface Science, 2009, 603, 257-264.	0.8	92
49	InSbâ€TiOPc interfaces: Band alignment, ordering and structure dependent HOMO splitting. Surface Science, 2009, 603, 3160-3169.	0.8	7
50	Etching of silicon nanowires on Ag(110) by atomic hydrogen. Surface Science, 2009, 603, 3350-3354.	0.8	14
51	Modification of Charge Transfer and Energy Level Alignment at Organic/TiO ₂ Interfaces. Journal of Physical Chemistry C, 2009, 113, 13765-13771.	1.5	24
52	Ultrafast electron dynamics and recombination at the Ge/TiO ₂ interface. Journal of Physical Chemistry C, 2009, 113, 13772-13777.		

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55	Atomic origin of the scanning tunneling microscopy images of charge-density-waves on 1T-TaSe ₂ . Physica B: Condensed Matter, 2008, 403, 2207-2210.	1.3	1
56	Molecular Growth Determined by Surface Domain Patterns. Journal of Physical Chemistry C, 2008, 112, 6887-6890.	1.5	4
57	Strong Interactions in Dye-Sensitized Interfaces. Journal of Physical Chemistry C, 2008, 112, 5972-5977.	1.5	42
58	High resolution spectroscopic and microscopic signatures of ordered growth of ferrous sulfate in SO ₂ assisted corrosion of Fe ₃ O ₄ (100). Applied Physics Letters, 2007, 91, 093107.	1.5	8
59	Band bending and structure dependent HOMO energy at the ZnO(0001)-titanyl phthalocyanine interface. Surface Science, 2007, 601, 4222-4226.	0.8	10
60	Pb induced charge accumulation on InAs(111)B. Surface Science, 2007, 601, 3246-3252.	0.8	3
61	Adsorption of Cs on InAs(111) surfaces. Applied Surface Science, 2006, 252, 5267-5270.	3.1	6
62	Bonding of metal-free phthalocyanine to TiO ₂ (110) single crystal. Solar Energy Materials and Solar Cells, 2006, 90, 3602-3613.	3.0	35
63	Adsorption site, core level shifts and charge transfer on the Pd(111)-I(111) surface. Surface Science, 2006, 600, 3093-3098.	0.8	9
64	Self-ordering of metal-free phthalocyanine on InAs(100) and InSb(100). Journal of Physics Condensed Matter, 2006, 18, 10707-10723.	0.7	14
65	Perturbation of Ge(111) and Si(111)-Sn surfaces by adsorption of dopants. Surface Science, 2006, 600, 3154-3159.	0.8	4
66	The surface behavior of mercury on iron systems. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2006, 37, 1049-1056.	1.0	7
67	Surface chemistry of mercury on zinc and copper. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2006, 37, 1057-1066.	1.0	2
68	Creation of a metallic channel at the Sn-InAs(111)B surface studied using synchrotron-radiation photoelectron spectroscopy. Physical Review B, 2006, 74, .	1.1	6
69	Chemical reaction and interface formation on InAs(111)-Co surfaces. Surface Science, 2005, 574, 181-192.	0.8	6
70	An ordered layer of molecular iodine on Ge(100) 2 \times 1. Surface Science, 2004, 556, 203-212.	0.8	8
71	Cerium-induced reconstructions on the Si(111) surface. Surface Science, 2004, 558, 49-56.	0.8	10
72	Surface phase transitions at metal-semiconductor interfaces: a revisit is needed. Applied Surface Science, 2004, 234, 274-285.	3.1	8

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73	CO bonding on tin modified Pt(111). Surface Science, 2003, 526, 184-192.	0.8	14
74	Oxygen structures on Fe(110). Surface Science, 2003, 527, 163-172.	0.8	42
75	Interaction between oxygen and InAs(111) surfaces, influence of the electron accumulation layer. Applied Surface Science, 2003, 212-213, 589-594.	3.1	13
76	Photoelectron microscopy of filiform corrosion of aluminum. Applied Surface Science, 2003, 218, 155-162.	3.1	11
77	Electronic structure of SnO ₂ (110)-1 and sputtered SnO ₂ (110) revealed by resonant photoemission. Surface Science, 2002, 499, 85-93.	0.8	28
78	Investigation of the surface phase diagram of Fe/S. Surface Science, 2002, 515, 135-142.	0.8	19
79	Corrosive adsorption of Sn on the Pt(111) surface. Surface Science, 2002, 515, 462-470.	0.8	10
80	Oxygen-deficient SnO ₂ (110): a STM, LEED and XPS study. Surface Science, 2001, 477, 50-58.	0.8	28
81	Influence of charged impurities on the surface phases of Sn/Ge(111). Surface Science, 2001, 477, 227-234.	0.8	12
82	Synchrotron radiation photoelectron spectroscopy study of Pb-Pc thin films on InSb(100). Surface Science, 2001, 486, 55-64.	0.8	24
83	High resolution photoemission study on SnO ₂ gas sensors. Thin Solid Films, 2001, 391, 192-197.	0.8	11
84	Influence of O and Co on the early stages of sintering of WC-Co: a surface study by AES and STM. Acta Materialia, 2000, 48, 4357-4362.	3.8	22
85	Surface structure and local bonding on the Si(111)-Ge surface. Applied Surface Science, 2000, 166, 209-213.	3.1	2
86	Li-induced phase transition from the Ge(111)-1 surface reconstruction to the Ge(111)-3 surface reconstruction on lithium germanide. Physical Review B, 2000, 61, 4963-4967.	1.1	9
87	Oxidation of Ce on Si(111) studied by high-resolution photoelectron spectroscopy. Surface Science, 2000, 464, 117-122.	0.8	7
88	Bridge-bonded atomic oxygen on Pt(110). Physical Review B, 2000, 61, 13144-13149.	1.1	67
89	Surface structures on sputtered/annealed WC(0001). Journal of Physics Condensed Matter, 1999, 12, 773-782.	0.7	7
90	Atomic structure of the As-rich InAs(100) surface. Physical Review B, 1999, 59, 15285-15289.	1.1	31

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91	Studies of highly oriented CeO ₂ films grown on Si(111) by pulsed laser deposition. <i>Thin Solid Films</i> , 1999, 348, 3-7.	0.8	50
92	CeO ₂ on Si(111) $\sqrt{7} \times \sqrt{7}$ and Si(111) $\sqrt{1} \times \sqrt{1}$, an interface study by high-resolution photoelectron spectroscopy. <i>Applied Surface Science</i> , 1999, 148, 164-170.	3.1	20
93	Atomic origins of the Si 2p surface core-level shifts of the $\sqrt{3} \times \sqrt{3} R(30^\circ)$ -Ag structure. <i>Europhysics Letters</i> , 1999, 45, 65-70.	0.7	16
94	Adsorption of SO ₂ on Cu(100) and Cu(100)-c(2 $\sqrt{2}$ \times 2)-O surfaces studied with photoelectron spectroscopy. <i>Vacuum</i> , 1998, 49, 171-174.	1.6	20
95	STM and photoelectron spectroscopy studies of silicon-cerium dioxide interface formation. <i>Vacuum</i> , 1998, 49, 175-179.	1.6	2
96	Reaction of oxygen and sulphur dioxide with Cu(100)-c(2 $\sqrt{2}$ \times 2)-Mn surface alloy. <i>Surface Science</i> , 1998, 408, 326-334.	0.8	29
97	Solution of Ge(111)-(4 $\sqrt{4}$ \times 4)-Ag structure using direct methods applied to X-ray diffraction data. <i>Surface Science</i> , 1998, 418, 395-406.	0.8	28
98	Electronic structure of CeSe probed by resonant photoemission spectroscopy: A test case for the single-impurity Anderson Hamiltonian. <i>Physical Review B</i> , 1998, 57, 12030-12035.	1.1	6
99	NH ₃ on Si(111) $\sqrt{7} \times \sqrt{7}$: Dissociation and surface reactions. <i>Physical Review B</i> , 1998, 57, 2327-2333.	1.1	33
100	Iodine reaction and passivation of the Ge(111) surface. <i>Surface Science</i> , 1997, 371, 264-276.	0.8	26
101	Etching and a disordered overlayer on the Ge(100)-S surface. <i>Applied Surface Science</i> , 1997, 115, 87-95.	3.1	21
102	An Incommensurate Reconstruction Studied with Scanning Tunnelling Microscopy and Surface X-Ray Diffraction. <i>Microscopy Microanalysis Microstructures</i> , 1997, 8, 167-174.	0.4	35
103	Observation of true c(8 $\sqrt{2}$ \times 2) symmetry in scanning tunnelling microscopy images of the clean InSb(001) surface. <i>Surface Science</i> , 1996, 350, L221-L226.	0.8	23
104	Hydrogen adsorption on the -Sn surface alloy studied by high resolution core level photoelectron spectroscopy. <i>Applied Surface Science</i> , 1996, 99, 371-378.	3.1	37
105	Reaction of I ₂ with the (001) surfaces of GaAs, InAs, and InSb. I. Chemical interaction with the substrate. <i>Physical Review B</i> , 1996, 54, 2101-2113.	1.1	40
106	Reaction of I ₂ with the (001) surfaces of GaAs, InAs, and InSb. II. Ordering of the iodine overlayer. <i>Physical Review B</i> , 1996, 54, 2114-2120.	1.1	10
107	InSb(1 \times 1 \times 1) $\sqrt{3} \times \sqrt{3}$ -1: New surface reconstruction. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1996, 14, 957.	1.6	5
108	Structural and electronic evolution on the Ge(111)-Ag surface. <i>Physical Review B</i> , 1995, 52, 14104-14110.	1.1	30

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109	Clean and Cs-exposed Si(111) $\sqrt{3}\sqrt{3}$:B surface studied with high-resolution photoemission. Physical Review B, 1995, 52, 11165-11171.	1.1	12
110	Adsorption of tin on the Ge(111)-c(2 $\sqrt{3}$ \times 8) surface studied with scanning tunneling microscopy and photoelectron spectroscopy. Surface Science, 1995, 328, 80-94.	0.8	33
111	Morphology and atomic structure of the sputtered and annealed Mo ₃ Si and Cr ₃ Si (110) surfaces. Physical Review B, 1994, 50, 17639-17642.	1.1	0
112	Surface core-level shifts of Si(111) $\sqrt{7}\sqrt{7}$: A fundamental reassessment. Physical Review B, 1994, 50, 14277-14282.	1.1	74
113	Surface electronic structure of InSb(1 $\sqrt{2}$ \times 1 $\sqrt{2}$) $\sqrt{3}\sqrt{3}$ studied by angle-resolved photoelectron spectroscopy and scanning tunneling microscopy. Physical Review B, 1994, 50, 18172-18178.	1.1	12
114	Electronic and geometric structure of clean Pt ₃ Ti(111). Physical Review B, 1994, 50, 5620-5627.	1.1	34
115	Scanning tunneling microscopy of CdSe single crystal cleaved and "real" surface. Journal of Crystal Growth, 1994, 138, 545-549.	0.7	1
116	Geometry of the Ge(111)-Au($\sqrt{3}\sqrt{3}$)R30° reconstruction. Physical Review B, 1994, 50, 4470-4475.	1.1	23
117	Adsorption of Sn on Si(111) $\sqrt{7}\sqrt{7}$: reconstructions in the monolayer regime. Surface Science, 1994, 314, 179-187.	0.8	68
118	Formation of an iodine zig-zag chain c(2 $\sqrt{3}$ \times 4) reconstruction on the Ge(111) surface. Microscopy Microanalysis Microstructures, 1994, 5, 277-282.	0.4	3
119	Initial growth of silver on Ge(111) studied by scanning tunneling microscopy. Physical Review B, 1993, 47, 15669-15674.	1.1	41
120	Sm- and Yb-induced reconstructions of the Si(111) surface. Physical Review B, 1993, 48, 11014-11019.	1.1	60
121	Adatom and rest-atom contributions in Ge(111)c(2 $\sqrt{3}$ \times 8) and Ge(111)-Sn(7 $\sqrt{3}$ \times 7) core-level spectra. Physical Review B, 1993, 48, 2012-2015.	1.1	42
122	High-resolution core-level studies of VC _{0.8} O surfaces. Physical Review B, 1993, 47, 10769-10774.	1.1	22
123	Sn-induced surface reconstructions on the Ge(111) surface studied with scanning tunneling microscopy. Surface Science, 1992, 271, L357-L361.	0.8	42