Christine Goyhenex

List of Publications by Year
in descending order

59 papers	963 citations	516215 16 h-index	476904 29 g-index
61 all docs	61 docs citations	61 times ranked	864 citing authors

#	Article	IF	Citations
1	Size effect in the CO chemisorption on palladium clusters supported on magnesium oxide. Surface Science, 1992, 272, 283-288.	0.8	118
2	Local strain analysis of the herringbone reconstruction of Au(111) through atomistic simulations. Physical Review B, 2002, 65, .	1.1	66
3	Pt/Co(0001) superstructures in the submonolayer range: A tight-binding quenched-molecular-dynamics study. Physical Review B, 1999, 60, 2781-2788.	1.1	58
4	In-situmeasurements of the lattice parameter of supported palladium clusters. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1994, 69, 1073-1084.	0.8	52
5	Theoretical insight in the energetics of Co adsorption on a reconstructed Au(111) substrate. Physical Review B, 2001, 63, .	1.1	49
6	Limitation of Auger electron spectroscopy in the determination of the metal-on-oxide growth mode: Pd on MgO(100). Surface Science, 1996, 350, 103-112.	0.8	43
7	Effect of the chemical order on the electrocatalytic activity of model PtCo electrodes in the oxygen reduction reaction. Electrochimica Acta, 2013, 108, 605-616.	2.6	43
8	Atomistic mechanisms for the ordered growth of Co nanodots on Au(788): a comparison between VT-STM experiments and multi-scaled calculations. Surface Science, 2004, 559, 47-62.	0.8	36
9	FTIR studies of the adsorption of CO on supported metallic clusters. Surface Science, 1996, 352-354, 475-479.	0.8	35
10	Cluster critical size effect during growth on a heterogeneous surface. Physical Review B, 2004, 69, .	1.1	34
11	In situ study by SEELFS of the first stages of the epitaxial growth of palladium clusters on MgO(100). Journal of Electron Spectroscopy and Related Phenomena, 1992, 61, 65-82.	0.8	32
12	Dominant Role of the Epitaxial Strain in the Magnetism of Core-Shell<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Co</mml:mi><mml:mo>/</mml:mo><mml:mi>Au</mml:mi></mml:math>Self-Organized Nanodots. Physical Review Letters, 2009, 103, 067202.	2.9	30
13	Size Effects in Heterogeneous Catalysis. , 1997, , 117-152.		24
14	Adatom and dimer migration in heteroepitaxy: Co/Pt(111). Surface Science, 2006, 600, 15-22.	0.8	23
15	Structural, electronic and magnetic properties of , for M=13, 19, and 55, from first principles. Journal of Magnetism and Magnetic Materials, 2014, 355, 215-224.	1.0	23
16	Theoretical determination of two critical sizes for strain relaxation during Co/Pt(111) heteroepitaxy. Surface Science, 2000, 446, 272-282.	0.8	22
17	Diffusion piloted ordering in codeposited CoPt epitaxial layers: Experiment and quenched molecular dynamics simulations. Physical Review B, 2008, 78, .	1.1	20
18	Evolution of the morphology of small Co clusters grown on Au(1 1 1). Applied Surface Science, 2004, 226, 178-184.	3.1	16

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19	Long-time scale molecular dynamics study of Co diffusion on the Au(111) surface. Computational Materials Science, 2003, 27, 181-185.	1.4	15
20	Unified picture of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>d</mml:mi></mml:mrow></mml:math>-band and core-level shifts in transition metal alloys. Physical Review B, 2011, 83, .	1.1	15
21	Revised tight-binding second moment potential for transition metal surfaces. Surface Science, 2012, 606, 325-328.	0.8	14
22	The fate of mass selected silver clusters deposited on Pd(100). Surface Science, 1995, 331-333, 838-843.	0.8	12
23	Preparation of anisotropic magneticFeNiPt2films on MgO(001): Atomistic mechanisms for the interdiffusion of twoL10phases. Physical Review B, 2006, 74, .	1.1	12
24	Atomic ordering in nano-layered FePt. Intermetallics, 2009, 17, 907-913.	1.8	12
25	Compressive strain versus tensile strain. Applied Surface Science, 2001, 177, 238-242.	3.1	11
26	Magnetism of CoPd self-organized alloy clusters on Au(111). Journal of Applied Physics, 2013, 114, 223912.	1.1	11
27	IrPd nanoalloys: simulations, from surface segregation to local electronic properties. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	10
28	Rules for tight-binding calculations in bi-metallic compounds based on density functional theory: the case of Coâ€“Au. Journal of Physics Condensed Matter, 2010, 22, 505503.	0.7	9
29	Atomic-Scale Faceting in CoPt Nanoparticles Epitaxially Grown on NaCl. Crystal Growth and Design, 2014, 14, 2201-2208.	1.4	9
30	How the hydrogen sorption properties of palladium are modified through interaction with iridium. Physical Chemistry Chemical Physics, 2017, 19, 32451-32458.	1.3	8
31	Atomistic simulations of relaxation and reconstruction phenomena in heteroepitaxy: Co/Au(1 1 1). Applied Surface Science, 2002, 188, 134-139.	3.1	7
32	Interplay between interfacial and structural properties on the magnetism of self-organized core-shell Co/Pt supported nanodots. Physical Review B, 2011, 84, .	1.1	7
33	Ordering trends in transition metal alloys from tight-binding electronic structure calculations. Physical Review B, 2011, 84, .	1.1	7
34	AuNi alloy monolayer films electrodeposited on Au(111): An in situ STM study. Surface Science, 2013, 607, 25-32.	0.8	7
35	Environment dependence of magnetic moment and atomic level shifts within tight-binding approximation: An illustration in the case of cobalt. Surface Science, 2016, 646, 261-268.	0.8	7
36	Unraveling Finite Size Effects on Magnetic Properties of Cobalt Nanoparticles. Journal of Physical Chemistry C, 2019, 123, 4531-4539.	1.5	6

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37	Lattice mismatch effect in atomic migration along steps during heteroepitaxial metal growth. Surface Science, 2007, 601, L132-L135.	0.8	5
38	Disentangling coordination and alloy effects in transition-metal nanoalloys from their electronic structure. Physical Review B, 2013, 88, .	1.1	5
39	Electronic structure of CoPt based systems: from bulk to nanoalloys. Journal of Physics Condensed Matter, 2015, 27, 455503.	0.7	5
40	Self-controlled growth and two-dimensional ordering of metallic nanoparticles. Applied Physics Letters, 2006, 88, 153122.	1.5	4
41	Atomic Migration in Bulk and Thin Film L1₀ Alloys: Experiments and Molecular Dynamics Simulations. Defect and Diffusion Forum, 2007, 263, 41-50.	0.4	4
42	Role of spâ€“d hybridization in the formation of stacking defects at metal surfaces. Surface Science, 2008, 602, 2681-2688.	0.8	4
43	Atomic-Migration-Controlled Processes in Intermetallics. Defect and Diffusion Forum, 0, 277, 113-118.	0.4	4
44	Chemical ordering phenomena in nanostructured FePt: Monte Carlo simulations. Physical Chemistry Chemical Physics, 2015, 17, 28394-28406.	1.3	4
45	Kondo screening of the spin and orbital magnetic moments of Fe impurities in Cu. Physical Review B, 2017, 95, .	1.1	4
46	Atomic ordering in nano-layered FePt: Multiscale Monte Carlo simulation. Computational Materials Science, 2010, 49, S80-S84.	1.4	3
47	Surface induced superstructure transformation in L10FePt by Monte Carlo simulations implemented with Analytic Bond-Order Potentials. Materials Letters, 2013, 106, 273-276.	1.3	3
48	Thermodynamics versus kinetics in a morphology transition of nanoparticles. Physical Review B, 2013, 87, .	1.1	3
49	Surface mismatch and stress relief mechanisms at metallic surfaces. Applied Surface Science, 2002, 188, 163-169.	3.1	2
50	Superstructure Transformations in High-Temperature Intermetallic Nanolayers: Atomistic Simulation. , 0, 1, 3-27.		2
51	Tight-binding modelling of ferromagnetic metals and alloys. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 084004.	0.8	2
52	Atomic Migration Phenomena in Intermetallics with High Superstructure Stability. , 2008, , 277-288.		2
53	Interdiffusion of Two L1₀Phases without Long-Range Order Decrease: Experiments and Molecular Dynamics Simulations. Solid State Phenomena, 2007, 129, 59-66.	0.3	1
54	Formation of stacking defects at surfaces: From atomistic simulations to density functional theory calculations. Solid State Sciences, 2010, 12, 172-178.	1.5	1

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55	Surface Diffusion on Inhomogeneous Surfaces. Lecture Notes in Physics, 2010, , 123-159.	0.3	1
56	Atomic Ordering in Nano-layered FePt: Multiscale Monte Carlo Simulation. Materials Research Society Symposia Proceedings, 2009, 1177, 37.	0.1	0
57	Diffusion in Materials by Atomic-Scale Modeling: Exploiting the Predictive Power of Classical and First-Principles Molecular Dynamics. Defect and Diffusion Forum, 0, 297-301, 244-253.	0.4	0
58	Electronic Structure of Nanoalloys: A Guide of Useful Concepts and Tools. Engineering Materials, 2012, , 159-195.	0.3	0
59	A tight-binding atomistic approach for point defects and surfaces applied to the o-Al13Co4Âquasicrystalline approximant. Computational Materials Science, 2021, 200, 110826.	1.4	0