Carlos QuirÃ³s

List of Publications by Year
in descending order

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78	1,503	394421	330143
papers	citations	19 h-index	37 g-index

79	79	79	1940
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	3D magnetic configuration of ferrimagnetic multilayers with competing interactions visualized by soft X-ray vector tomography. Communications Physics, 2022, 5, .	5.3	4
2	Two-Step Resist Deposition of E-Beam Patterned Thick Py Nanostructures for X-ray Microscopy. Micromachines, 2022, 13, 204.	2.9	1
3	Ferromagnetic Resonance Studies in Magnetic Nanosystems. Magnetochemistry, 2021, 7, 126.	2.4	3
4	Magnetic textures and singularities in ferri/ferromagnetic multilayers. Journal of Magnetism and Magnetic Materials, 2021, 539, 168384.	2.3	2
5	Chiral asymmetry detected in a 2D array of permalloy square nanomagnets using circularly polarized x-ray resonant magnetic scattering. Nanotechnology, 2020, 31, 025702.	2.6	3
6	Layer-dependence of macroscopic and atomic magnetic correlations in Co/Pd multilayers. AIP Advances, 2020, 10, 065321.	1.3	1
7	Revealing 3D magnetization of thin films with soft X-ray tomography: magnetic singularities and topological charges. Nature Communications, 2020, 11, 6382.	12.8	29
8	Tailoring block copolymer nanoporous thin films with acetic acid as a small guest molecule. Polymer International, 2019, 68, 1914-1920.	3.1	4
9	Tunable ferromagnetic resonance in coupled trilayers with crossed in-plane and perpendicular magnetic anisotropies. Applied Physics Letters, 2019, 115, .	3.3	16
10	Crystalline Structure and Vacancy Ordering across a Surface Phase Transition in Sn/Cu(001). Journal of Physical Chemistry B, 2018, 122, 745-756.	2.6	1
11	Magnetic order and disorder in nanomagnets probed by superconducting vortices. Scientific Reports, 2018, 8, 12374.	3.3	2
12	Cycloidal Domains in the Magnetization Reversal Process of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Ni</mml:mi><mml:mn>80</mml:mn></mml:msub><mml:msub><mml:mi>Fe</mml:mi><mml:mi><mml: Physical Review Applied, 2018, 10, .	3.8	4
13	3D reconstruction of magnetization from dichroic soft X-ray transmission tomography. Journal of Synchrotron Radiation, 2018, 25, 1144-1152.	2.4	17
14	Observation of asymmetric distributions of magnetic singularities across magnetic multilayers. Physical Review B, 2017, 95, .	3.2	16
15	Deterministic propagation of vortex-antivortex pairs in magnetic trilayers. Applied Physics Letters, 2017, 110, .	3.3	17
16	Switchable field-tuned control of magnetic domain wall pinning along Co microwires by 3D e-beam lithographed structures. Journal of Magnetism and Magnetic Materials, 2016, 400, 213-218.	2.3	3
17	Tuning interfacial domain walls in GdCo/Gd/GdCoâ€² spring magnets. Physical Review B, 2015, 92, .	3.2	15
18	Nanoscale imaging of buried topological defects with quantitative X-ray magnetic microscopy. Nature Communications, 2015, 6, 8196.	12.8	61

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19	Asymmetric grazing incidence small angle x-ray scattering and anisotropic domain wall motion in obliquely grown nanocrystalline Co films. Nanotechnology, 2014, 25, 335704.	2.6	18
20	Large negative thermal expansion of the Co subnetwork measured by EXAFS in highly disordered Nd_{1â^'x}Co_xthin films with perpendicular magnetic anisotropy. Journal of Physics Condensed Matter, 2013, 25, 426002.	1.8	6
21	Interface effects on Gd induced disordering of Co films on Pt(111). Surface Science, 2012, 606, 933-937.	1.9	1
22	Pulsed rf-GD-TOFMS for depth profile analysis of ultrathin layers using the analyte prepeak region. Analytical and Bioanalytical Chemistry, 2012, 403, 2437-2448.	3.7	14
23	Determination of the magnetostrictive atomic environments in FeCoB alloys. Physical Review B, 2012, 85, .	3.2	12
24	Minor elements determination and evaluation of diffusion/segregation effects on ultra-thin layers using pulsed-RF-GD-TOFMS. Journal of Analytical Atomic Spectrometry, 2011, 26, 1604.	3.0	15
25	Direct chemical in-depth profile analysis and thickness quantification of nanometer multilayers using pulsed-rf-GD-TOFMS. Analytical and Bioanalytical Chemistry, 2010, 396, 2881-2887.	3.7	23
26	Magnetic properties of amorphous Co0.74Si0.26â^•Si multilayers with different numbers of periods. Low Temperature Physics, 2010, 36, 821-825.	0.6	0
27	Surface x-ray diffraction analysis using a genetic algorithm: the case of Sn/Cu(100)-(3sqrt {2}imes) Tj ETQq1 1 0.784314 rgBT /Overlock	1.8	9
28	Enhancement of antiferromagnetic coupling in magnetic multilayers by low energy ion beam substrate nanopatterning. Journal of Physics Condensed Matter, 2009, 21, 224024.	1.8	5
29	Resolving antiferromagnetic states in magnetically coupled amorphous Co-Si-Si multilayers by soft x-ray resonant magnetic scattering. Physical Review B, 2008, 78, .	3.2	12
30	Stacking dependent disordering processes in Gd/Co/Pt(111) studied with surface x-ray diffraction. Physical Review B, 2008, 78, .	3.2	3
31	Influence of the number of periods on the magnetization reversal process of antiferromagnetically coupled amorphous CoxSi1â^'x/Si multilayers. Journal of Non-Crystalline Solids, 2007, 353, 959-961.	3.1	1
32	Structural and magnetic properties of Co_xSi_{1â^'x}thin films and multilayers. Journal of Physics Condensed Matter, 2007, 19, 486003.	1.8	2
33	Multiple-length-scale small-angle X-ray scattering analysis on maghemite nanocomposites. Journal of Applied Crystallography, 2007, 40, s696-s700.	4.5	7
34	Atomic pair ordering and magnetic anisotropy of Feâ€“Si amorphous films studied by linearly polarized EXAFS. Journal of Magnetism and Magnetic Materials, 2007, 316, e390-e392.	2.3	5
35	Electron inelastic mean free path and dielectric properties of a-boron, a-carbon, and their nitrides as determined by quantitative analysis of reflection electron energy loss spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 396-407.	2.1	12
36	Temperature effects on the magnetic properties of antiferromagnetically coupled amorphous Co0.74Si0.26/Si multilayers. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1420-1424.	1.8	1

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37	Interlayer coupling mechanisms in amorphousCoxSi1â^'xâ^•Simultilayers. Physical Review B, 2006, 74, .	3.2	11
38	Low-temperature growth favours hcp structure, flatness and perpendicular magnetic anisotropy of thin (1â€“5 nm) Co films on Pt(111). Journal of Physics Condensed Matter, 2005, 17, 5551-5561.	1.8	8
39	Fermi surface gapping and nesting in the surface phase transition ofSnâ^•Cu(100). Physical Review B, 2005, 72, .	3.2	28
40	Antiferromagnetic coupling in amorphousCoxSi1â^'xâ^•Simultilayers. Physical Review B, 2005, 71, .	3.2	24
41	Dense arrays of Co nanocrystals epitaxially grown on ion-patterned Cu(110) substrates. Applied Physics Letters, 2005, 86, 141906.	3.3	10
42	Structure and Reactivity of Surface Oxides on Pt(110) during Catalytic CO Oxidation. Physical Review Letters, 2005, 95, 255505.	7.8	327
43	Structural and magnetic properties of bcc Co films on Pt(001) studied by magnetic resonant surface x-ray diffraction, STM, and magneto-optical Kerr effect. Physical Review B, 2004, 70, .	3.2	22
44	Quantitative REELS of amorphous carbon and carbon nitride films. Surface and Interface Analysis, 2004, 36, 820-823.	1.8	3
45	Hydrogenation of carbon monoxide on Ni(111) investigated with surface X-ray diffraction at atmospheric pressure. Surface Science, 2004, 557, 21-30.	1.9	33
46	Structure of self-organized Fe clusters grown on Au(111) analyzed by grazing incidence x-ray diffraction. Physical Review B, 2004, 69, .	3.2	22
47	Self-Limited Growth of a Thin Oxide Layer on Rh(111). Physical Review Letters, 2004, 92, 126102.	7.8	198
48	Structure and Pt magnetism of FePt nanoparticles investigated with X-ray diffraction. Journal of Magnetism and Magnetic Materials, 2003, 264, 202-208.	2.3	15
49	Compressibility of CO adsorbed on Ni from 10â^'6 mbar to 1.2 bar ambient CO pressures investigated with X-ray diffraction. Surface Science, 2003, 522, 161-166.	1.9	27
50	Ultrathin Pt films on Ni(111): Structure determined by surface x-ray diffraction. Physical Review B, 2003, 68, .	3.2	7
51	Stacking reversal as a source of perpendicular magnetic anisotropy in Ni-Pt multilayers. Physical Review B, 2003, 67, .	3.2	11
52	Magnetic anisotropy of submonolayer Pt films grown on Ni(110). Journal of Physics Condensed Matter, 2003, 15, 4279-4285.	1.8	1
53	Magnetic anisotropy of ultrathin cobalt films on Pt(111) investigated with x-ray diffraction:â€ƒEffect of atomic mixing at the interface. Physical Review B, 2002, 65, .	3.2	38
54	Electronic structure of TiO2 monolayers grown on Al2O3 and MgO studied by resonant photoemission spectroscopy. Surface Science, 2002, 507-510, 672-677.	1.9	10

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55	Friction mechanisms of amorphous carbon nitride films under variable environments: a triboscopic study. Surface and Coatings Technology, 2002, 160, 138-144.	4.8	75
56	Factor analysis applied to the study of valence band resonant photoemission spectra in transition-metal compounds. Surface and Interface Analysis, 2002, 34, 244-247.	1.8	6
57	Electronic interaction at the TiO2â€“Al2O3 interface as observed by X-ray absorption spectroscopy. Surface Science, 2001, 482-485, 470-475.	1.9	25
58	Resonant Photoemission and X-ray Absorption Study of the Electronic Structure of the TiO2â^'Al2O3 Interface. Langmuir, 2001, 17, 7339-7343.	3.5	12
59	Resonant photoemission of TiN films. Physical Review B, 2001, 63, .	3.2	14
60	Friction measurements of CNx and TiCxNy films by scanning force microscopy. Surface and Interface Analysis, 2000, 30, 638-642.	1.8	4
61	Correlation between bonding structure and mechanical properties of amorphous carbon nitride thin films. Surface and Coatings Technology, 2000, 125, 284-288.	4.8	13
62	Determination of resputtering yields in carbon nitride films grown by dual ion beam sputtering. Surface and Coatings Technology, 2000, 125, 366-370.	4.8	1
63	BN and ZrN AES Spectra Obtained by Depth Profiling of ZrN/BN Multilayers. Surface Science Spectra, 2000, 7, 86-92.	1.3	0
64	Correlation between Nâ€Š1s core level x-ray photoelectron and x-ray absorption spectra of amorphous carbon nitride films. Applied Physics Letters, 2000, 77, 803-805.	3.3	28
65	Bonding and morphology study of carbon nitride films obtained by dual ion beam sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 515-523.	2.1	26
66	Crystal-Field Effects at the TiO2â^'SiO2Interface As Observed by X-ray Absorption Spectroscopy. Langmuir, 2000, 16, 7066-7069.	3.5	32
67	Tribological and chemical characterization of ion beam-deposited CNx films. Vacuum, 1999, 52, 199-202.	3.5	13
68	The role of CN chemical bonding on the tribological behaviour of CNx coatings. Surface and Coatings Technology, 1999, 120-121, 594-600.	4.8	25
69	Oxidation study of Co/Cu multilayers by resonant X-ray reflectivity. Vacuum, 1999, 52, 109-113.	3.5	4
70	Combination of specular and off-specular low-angle x-ray diffraction in the study of Co/Cu multilayers: mesoscopic structure and layer oxidation. Surface and Interface Analysis, 1999, 27, 1-7.	1.8	2
71	Dielectric Properties of Ti, TiO2 and TiN from 1.5 to 60 eV Determined by Reflection Electron Energy Loss Spectroscopy (REELS) and Ellipsometry. Physica Status Solidi A, 1999, 175, 429-436.	1.7	13
72	Quantitative chemical depth profiles of ZrN/BN multilayers. Surface and Interface Analysis, 1998, 26, 806-814.	1.8	3

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73	Combination of specular and off-specular low-angle X-ray diffraction in the study of metallic multilayers. Solid State Communications, 1998, 108, 769-773.	1.9	2
74	Carbon nitride films synthesized by dual ion beam sputtering. Nuclear Instruments & Methods in Physics Research B, 1997, 122, 534-537.	1.4	11
75	Characterization of carbon nitride thin films prepared by dual ion beam sputtering. Applied Physics Letters, 1996, 69, 764-766.	3.3	41
76	Thin BN films obtained by dual-ion-beam sputtering: an FT-IR and spectroscopic ellipsometry characterization. Nuclear Instruments & Methods in Physics Research B, 1996, 112, 275-279.	1.4	5
77	Zr-BN multilayers obtained by ion-assisted sputtering: an FT-IR, GAXRD and AES depth profiling characterization. Surface and Coatings Technology, 1996, 84, 392-397.	4.8	1
78	Characterization of Zr thin films grown by dual ion-beam sputtering. Vacuum, 1994, 45, 1039-1041.	3.5	4